

Count tables and plots

2019-1-25

Tables

Here are the tables showing how many subjects in the drug group and how many subjects in the placebo group for each cluster. The results are from the ones with the smallest VI values where one, two, three or four variables were chosen.

```
kable(cluster_summary_table(km_1$km, km_1$data),  
      caption = 'One variable selection')
```

Table 1: One variable selection

| | cluster 1 | cluster 2 | cluster 3 | cluster 4 | Total |
|---------|-----------|-----------|-----------|-----------|-------|
| Drug | 44 | 5 | 11 | 15 | 75 |
| Placebo | 41 | 3 | 21 | 9 | 74 |
| Total | 85 | 8 | 32 | 24 | 149 |

```
kable(cluster_summary_table(km_2$km, km_2$data),  
      caption = 'Two variables selection')
```

Table 2: Two variables selection

| | cluster 1 | cluster 2 | cluster 3 | cluster 4 | Total |
|---------|-----------|-----------|-----------|-----------|-------|
| Drug | 11 | 1 | 25 | 5 | 42 |
| Placebo | 15 | 0 | 25 | 7 | 47 |
| Total | 26 | 1 | 50 | 12 | 89 |

```
kable(cluster_summary_table(km_3$km, km_3$data),  
      caption = 'Three variables selection')
```

Table 3: Three variables selection

| | cluster 1 | cluster 2 | cluster 3 | cluster 4 | Total |
|---------|-----------|-----------|-----------|-----------|-------|
| Drug | 44 | 6 | 1 | 21 | 72 |
| Placebo | 40 | 5 | 0 | 27 | 72 |
| Total | 84 | 11 | 1 | 48 | 144 |

```
kable(cluster_summary_table(km_4$km, km_4$data),  
      caption = 'Four variables selection')
```

Table 4: Four variables selection

| | cluster 1 | cluster 2 | cluster 3 | cluster 4 | Total |
|---------|-----------|-----------|-----------|-----------|-------|
| Drug | 11 | 7 | 2 | 15 | 35 |
| Placebo | 12 | 7 | 4 | 18 | 41 |
| Total | 23 | 14 | 6 | 33 | 76 |

The total number of subjects is different between those four table. This is because, with different variables selection, there are different number of missing values.

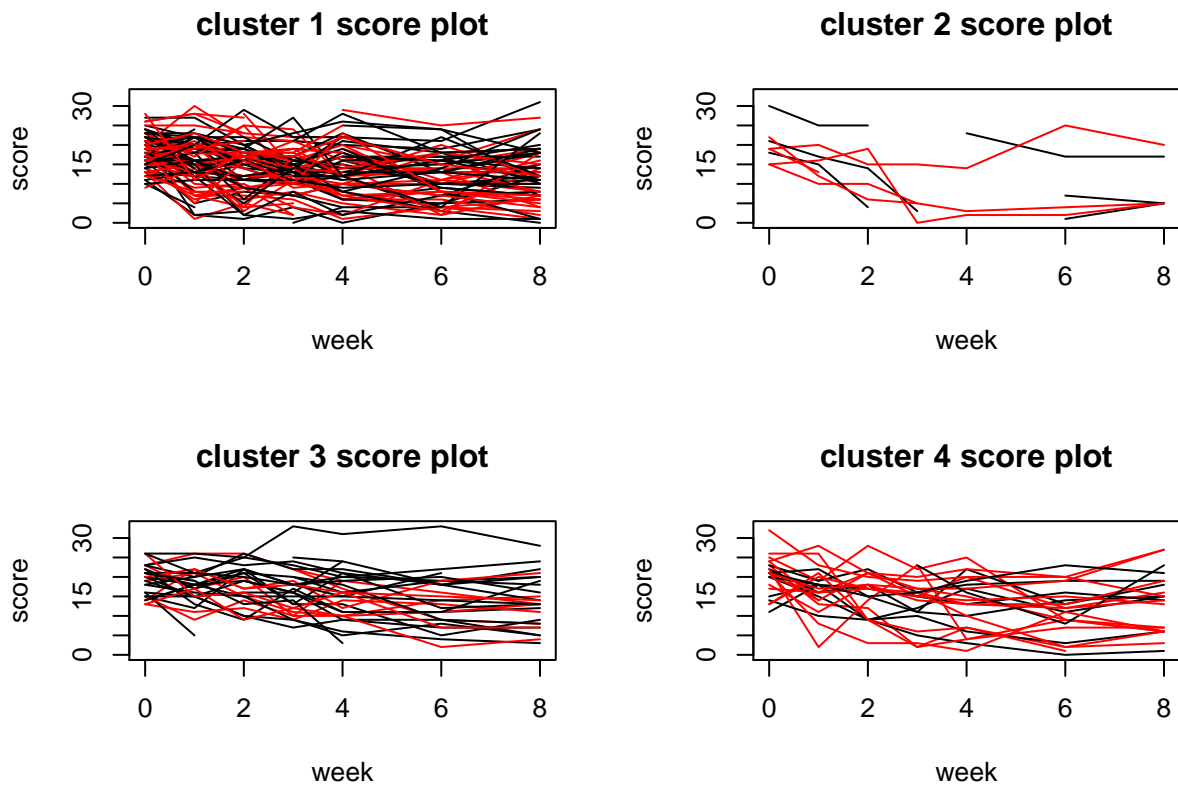
The differences between the drug group and the placebo group in each cluster are not significant.

Figures

The variables combination with the smallest VI in each scenario was selected. The subjects in each cluster were identified and their corresponding results were used to draw the following plots. However, there are some missing values in the results. Therefore, the plots may contain some discontinuous lines.

One variable selection

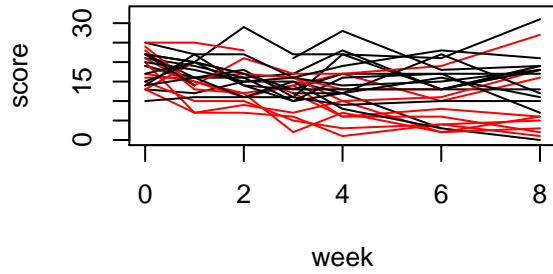
```
cluster_score_plot(km_1$km,km_1$data) # red for drug group, black for placebo
```



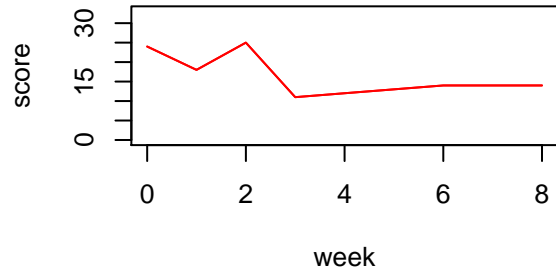
Two variables selection

```
cluster_score_plot(km_2$km,km_2$data) # red for drug group, black for placebo
```

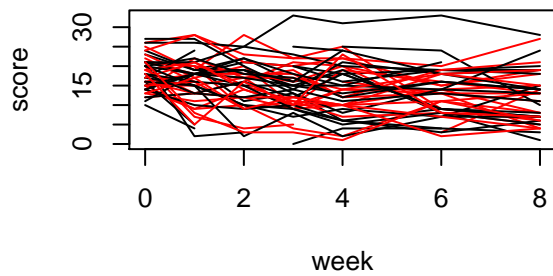
cluster 1 score plot



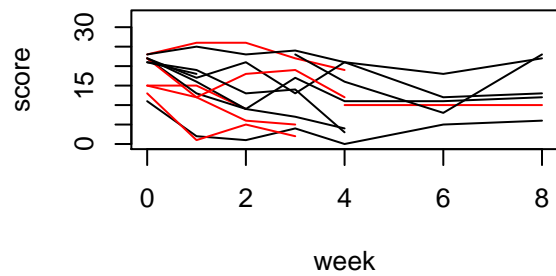
cluster 2 score plot



cluster 3 score plot



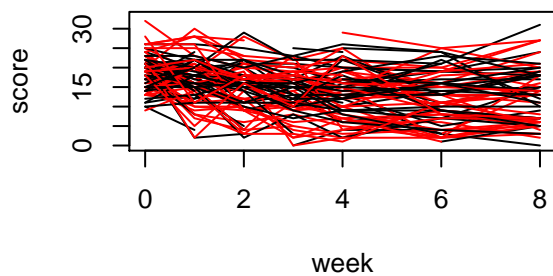
cluster 4 score plot



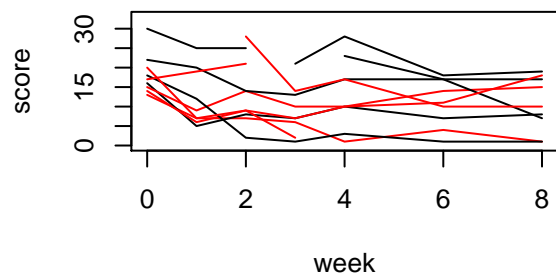
Three variables selection

```
cluster_score_plot(km_3$km,km_3$data) # red for drug group, black for placebo
```

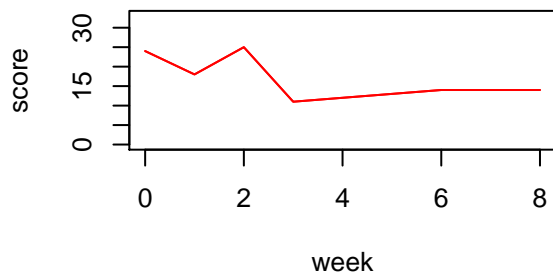
cluster 1 score plot



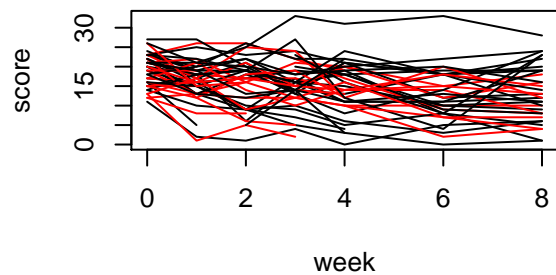
cluster 2 score plot



cluster 3 score plot



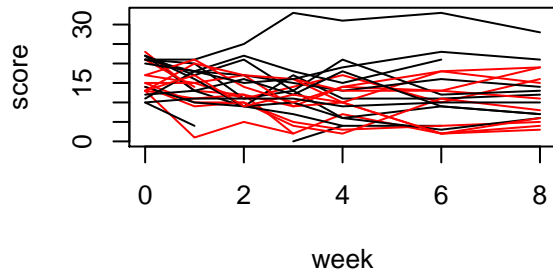
cluster 4 score plot



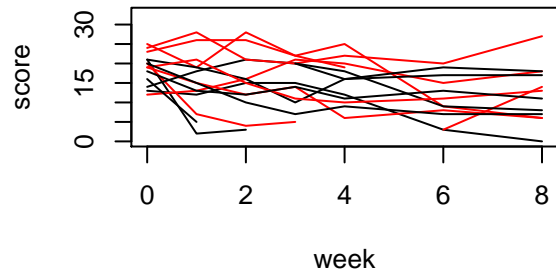
Four variables selection

```
cluster_score_plot(km_4$km, km_4$data) # red for drug group, black for placebo
```

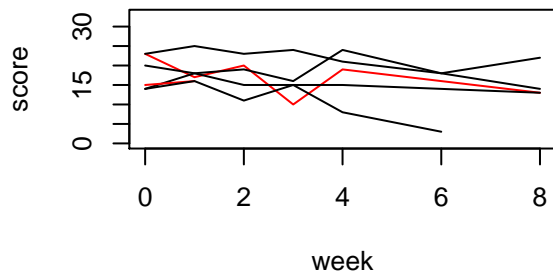
cluster 1 score plot



cluster 2 score plot



cluster 3 score plot



cluster 4 score plot

