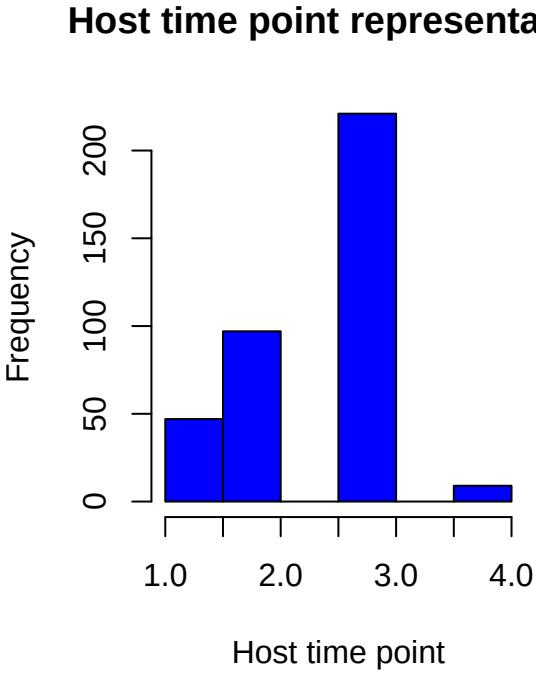
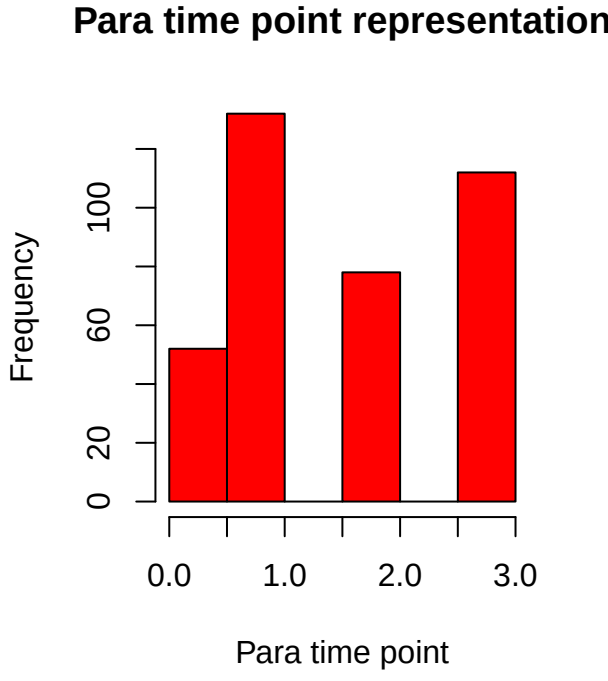
Task 1

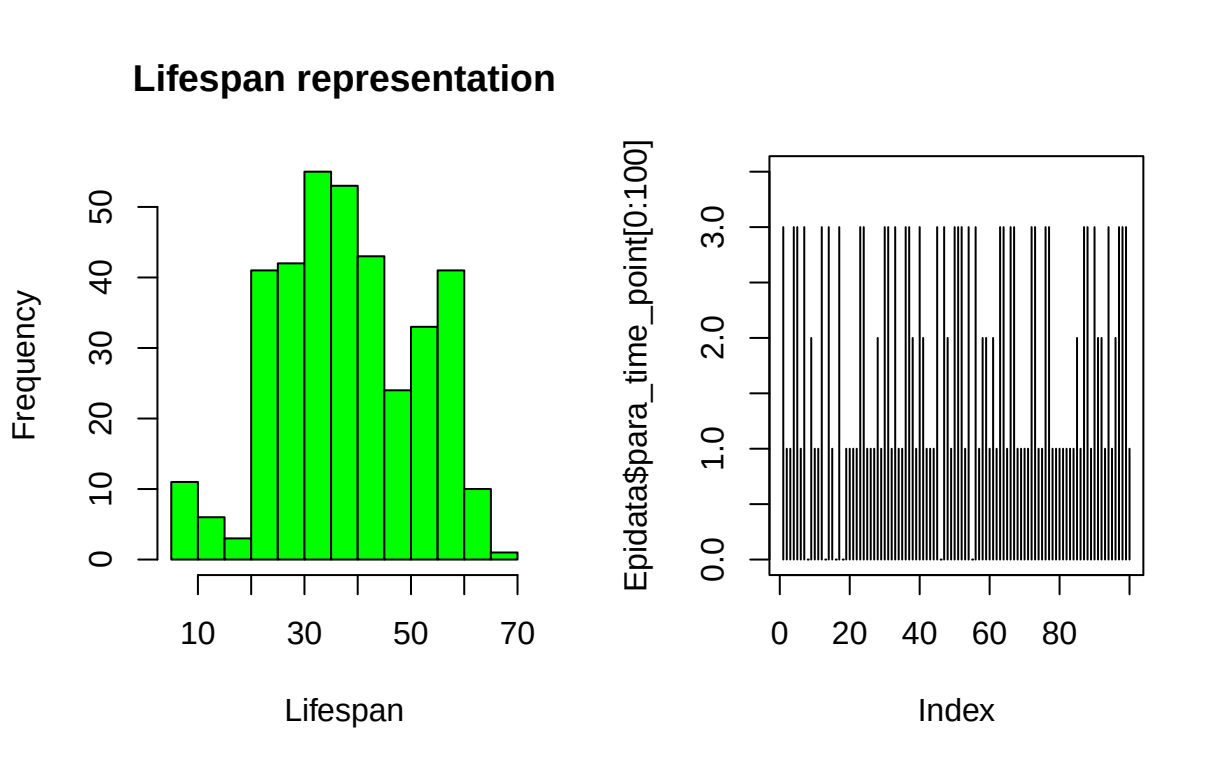
Inferences from analysis on the epidemiology dataset while comparing clone in respect to host time point, and para time point.

It was observed that the host time point moved in a parabolic motion which is equivalent to the bacteria growth curve (from a lag phase to a log phase and adopted a decline phase after attaining a stationary phase), but the para time host was observed to move in an undulating motion, hence, the lower the clone the lower the para time point across board.

Further confirmation are seen in histogram plots on Page 2, Fig A and B respectively.

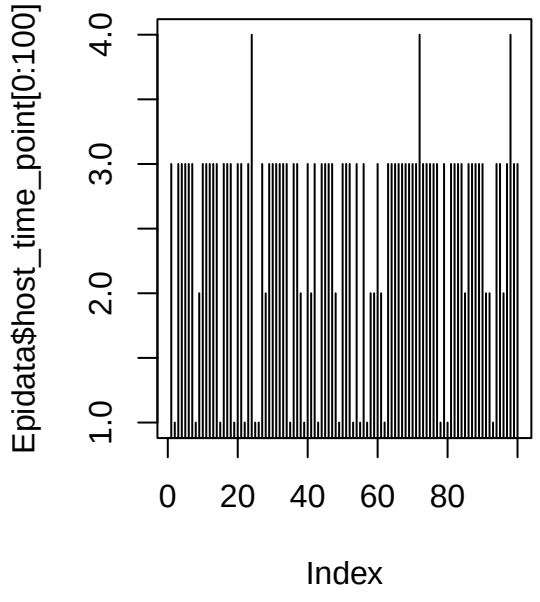

Host time point representation
Frequency
0
50
100
150
200
1.0
2.0
3.0
4.0
Host time point

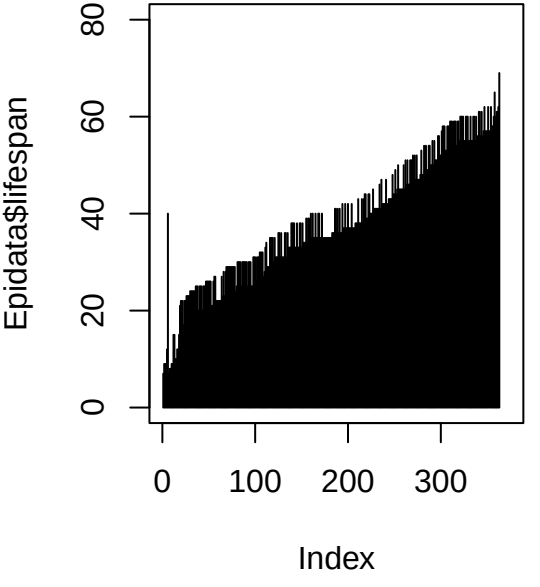

Para time point representation
Frequency
0
20
60
100
0.0
1.0
2.0
3.0
Para time point

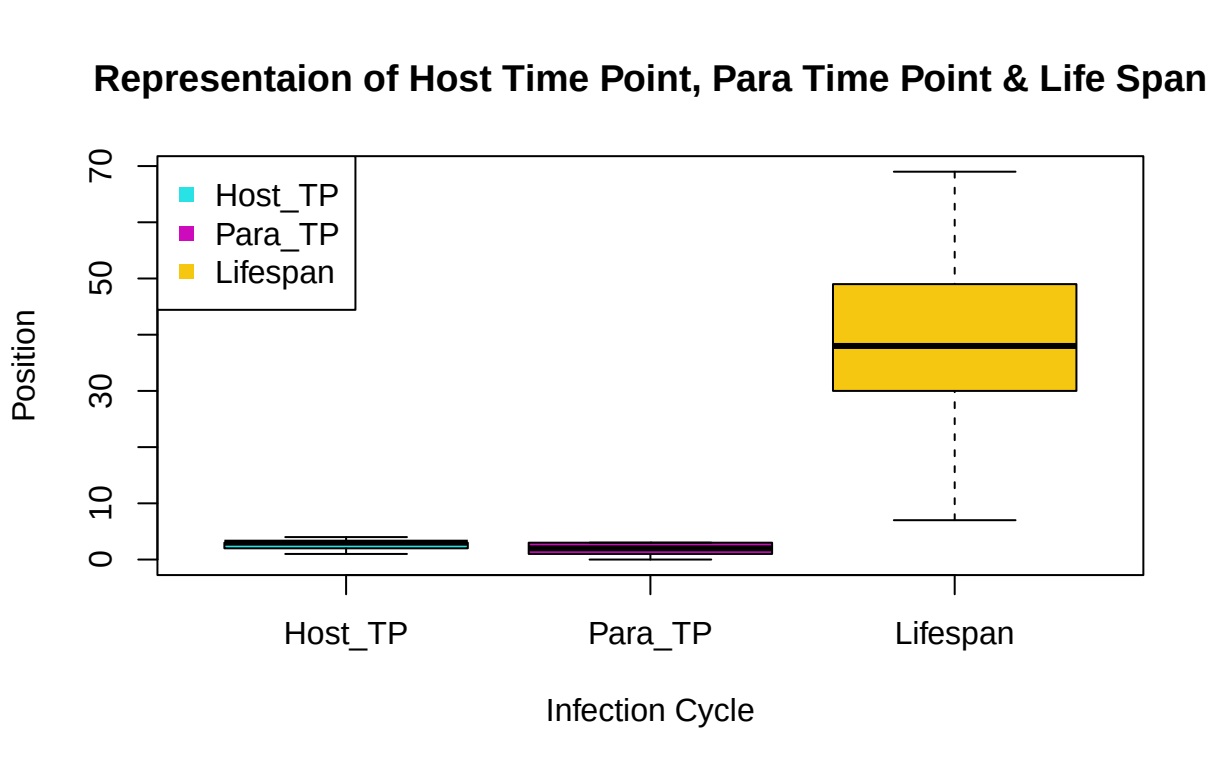

Lifespan representation
Frequency
0
10
20
30
40
50
10
30
50
70
Lifespan
Epidata$para_time_point[0:100]
0.0
1.0
2.0
3.0
0
20
40
60
80
Index

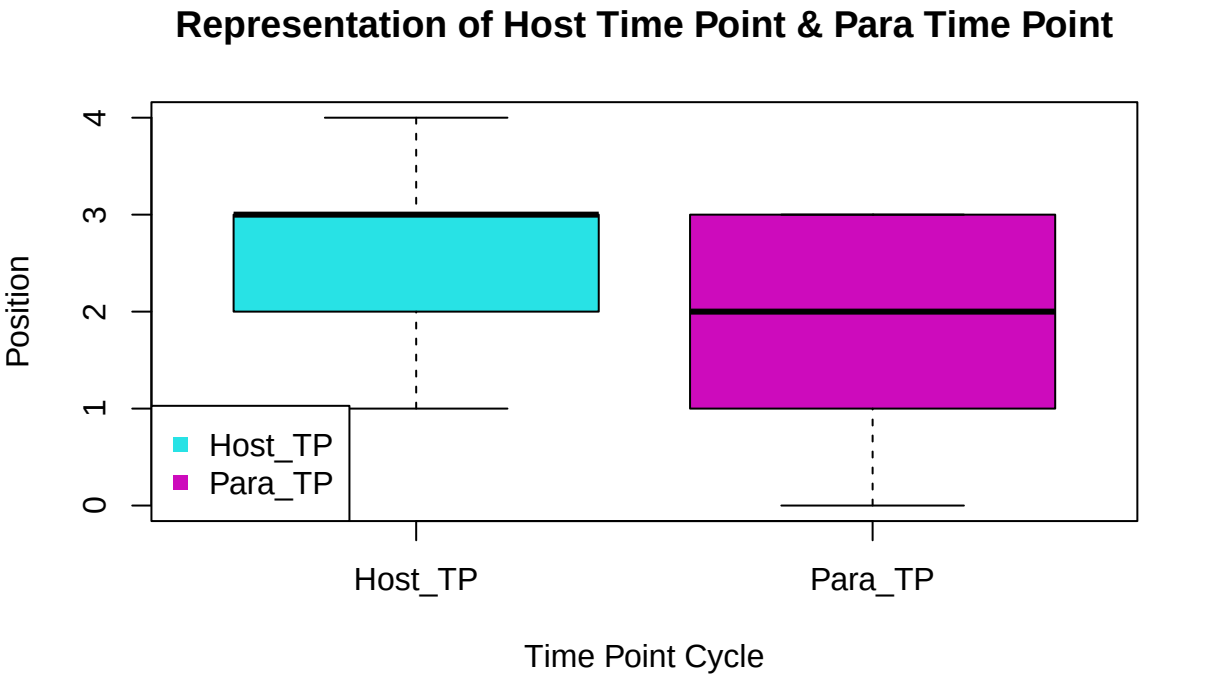
Epidata$para_time_point[0:100]
0.0
1.0
2.0
3.0
0
20
40
60
80
Index

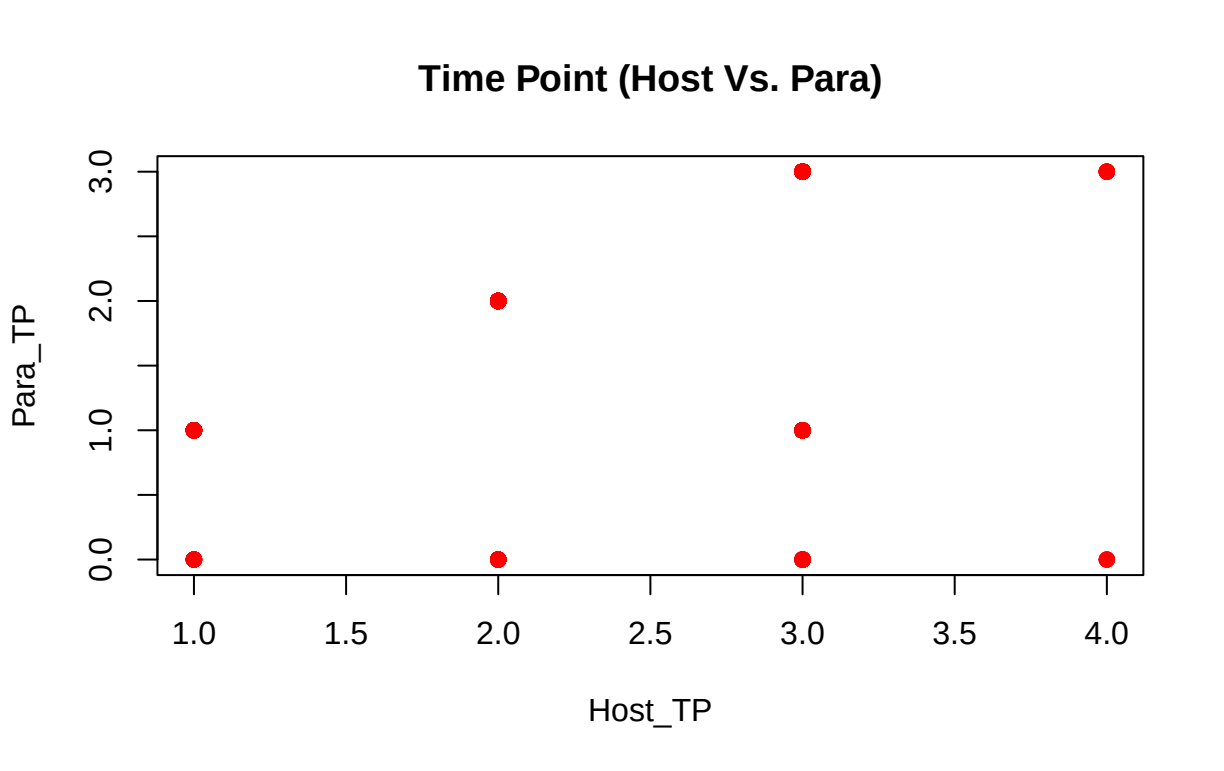
Epidata$host_time_point[0:100]
1.0
2.0
3.0
4.0
0
20
40
60
80
Index


Epidata$host_time_point[0:100]
1.0
2.0
3.0
4.0
0
20
40
60
80
Index

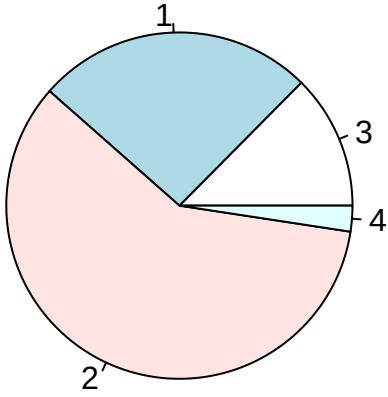

Epidata$lifespan
0
20
40
60
80
0
100
200
300
Index


Representaion of Host Time Point, Para Time Point & Life Span
Host_TP
Para_TP
Lifespan
Position
0
10
30
50
70
Host_TP
Para_TP
Lifespan
Infection Cycle

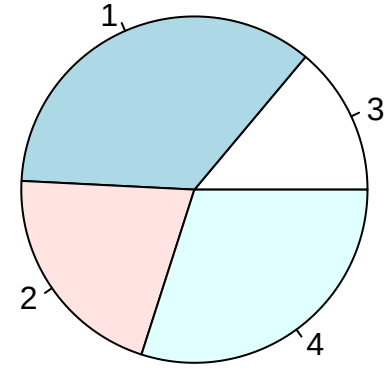
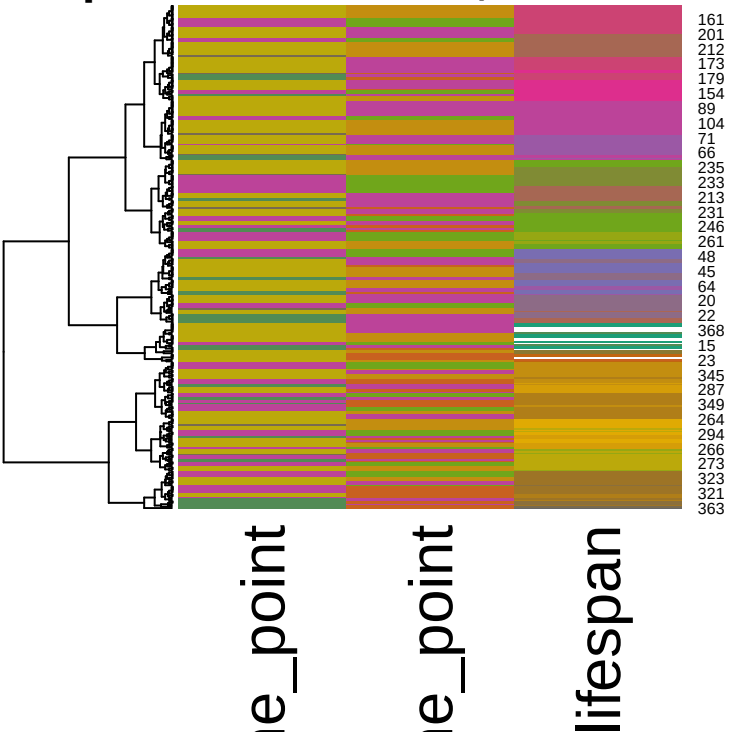

Representation of Host Time Point & Para Time Point
Position
0
1
2
3
4
Host_TP
Para_TP
Host_TP
Para_TP
Time Point Cycle


Time Point (Host Vs. Para)
Para_TP
0.0
1.0
2.0
3.0
1.0
1.5
2.0
2.5
3.0
3.5
4.0
Host_TP

Pie chart of Host_TP



Pie Chart of Para_TP



Heatmap Plot of Host_TP, Para_TP & Lifespan