# Question pour le rapport de TP

## Séance 1

### Study of the model

NB: Look at the example growth curves. Note the first remarks of what you notice/what you will need to take into account.

Qu : How would you do to find the ratio of interest?

Qu : Propose an approximation of the lag term. Imagine a context in which a precise study of the lag phase would be relevant.

Qu : Propose approximation(s) for the growth rate. Discuss the validity of these approximations.

Qu : How does n0 affect the growth of n(t) ?

### Solving the equations and presentation of the methods to find the ratio of interest

Qu : use alpha’s approximations to compare the actual growth (hindered by the lag term) to the potential growth (lag term is equal to 1 at all time t). Same question to compare the growth rate approximations.

Qu : TTD and exponential phase method. According to you, which method is the most precise ?

Qu : What other method could we use to find n0 from the log of ODt=0 ? Which parameters would we need ? Would the result be accurate ?

### Time To Detection method

Qu : Describe the method. Which hypothesis are made ?

## Séance 2

### Exploiting the exponential phase

Qu : Describe the method. Which hypothesis are made ?

Qu : Why do we focus on the exponential phase ?

### Conclusion

Qu : Why did we simplify the equation ?

Qu : What are the advantages of each method ?

Qu : Which method appears to be the most precise ?

Qu : Check the noise robustness of each method.

Qu : Which method would you pick ?