**Reinfections Manipulation**

**Raw data** from Alexandros: *reinfections.csv*

* **Total** Raw cases before removing bad data: 44924
* **from** 18/11/2020 **to** 29/09/2022

**Files used for the below procedures:**

* *ClearedCasesData.csv*

The last date recorded in this file is 08/05/2022.

* *reinfections.csv*

So for this file, all the reinfected cases after 08/05/2022 will be deleted (for code speed).

1. Clear raw data from bad data

**Folder:** *Re-Infections Clearing from Bad Data*

* Folder *ReInfections1*: (run first)
* Remove data that have the same Old and Reinfection ID.
* Remove data that the First Sampling date is not the same in *ClearedCasesData.csv* and *reinfections.csv* file.
* Folder *ReInfections2*: (run after ReInfections1)

Workspace from ReInfections1 is loaded.

The idea is to firstly check if the OldCaseID of every reinfection case, is included in *ClearedCasesData.csv* file.

* Folder *ReInfections3*: (run after ReInfections2)

Workspace from Reinfection2 is loaded.

Then, the second step is to check from previous results (ReInfections2), if the cases that OldCaseID is included in *ClearedCasesData.csv* file, also includes their ReinfectionID in in *ClearedCasesData.csv*.

Note:

* + *workspace2.mat* is the new table created in *Reinfections2* where the reinfection cases that their OldCaseID is not included in *ClearedCasesData.csv* file, are replaced with zeros (‘0’).
  + workspace2copy.mat is the workspace where the aforementioned zeros, are deleted.

**The objective from ReInfections2 & ReInfections 3 is to Remove Reinfection cases that are not included in *ClearedCasesData.csv* file.**

**Results:** *Results\_reinfections3.mat* OR *Reinfections\_ClearResults.csv*

**Total cases after the deletion of the above data:** 29636

1. Create a table with the full information of reinfected case

**Folder:** *New Tables*

In *CreatingNewTables.m* script, a new table is created that includes the full information of every reinfected case (copied from *ClearedCasesData* file).

**Results:** *workspace\_CreatingNewTables.mat* OR *ClearedReinfections\_FullInfo.csv*