Manuscript title: Investigating underlying human immunity genes, implicated diseases, and their relationship with the COVID-19

Supplementary material 3: Common genes-diseases.

| Diseases/Gene | $\begin{aligned} & \hline \mathrm{T} \\ & \mathrm{M} \\ & \mathrm{P} \\ & \mathrm{R} \\ & \mathrm{~S} \\ & \mathrm{~S} \\ & 4 \end{aligned}$ | C <br> D1 <br> 47 <br> /B <br> SG | $\begin{aligned} & \mathrm{C} \\ & \mathrm{X} \\ & \mathrm{C} \\ & \mathrm{R} \\ & 6 \end{aligned}$ | $\begin{aligned} & \hline \mathrm{C} \\ & \mathrm{C} \\ & \mathrm{R} \\ & 9 \end{aligned}$ | $\begin{aligned} & \hline \mathrm{S} \\ & \mathrm{~L} \\ & \mathrm{C} \\ & 6 \\ & \mathrm{~A} \\ & 2 \\ & 0 \end{aligned}$ | $\begin{aligned} & \hline \text { I } \\ & \text { R } \\ & \text { F } \\ & 9 \end{aligned}$ | $\begin{aligned} & \hline \text { T } \\ & \text { B } \\ & \text { K } \\ & 1 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{C} \\ & \mathrm{E} \\ & 2 \end{aligned}$ | $\begin{aligned} & \mathbf{M} \\ & \mathbf{I} \\ & \mathbf{F} \end{aligned}$ | $\begin{aligned} & \hline \mathbf{T} \\ & \mathrm{M} \\ & \mathbf{P} \\ & \mathrm{R} \\ & \mathrm{~S} \\ & \mathrm{~S} \\ & \mathbf{2} \end{aligned}$ | I | $\begin{aligned} & \hline \mathbf{T} \\ & \mathrm{R} \\ & \mathrm{~A} \\ & \mathrm{~F} \\ & \mathbf{3} \end{aligned}$ | $\begin{aligned} & \hline \mathbf{I} \\ & \mathrm{F} \\ & \mathbf{N} \\ & \mathbf{G} \end{aligned}$ | $\begin{aligned} & \hline \mathrm{U} \\ & \mathrm{~N} \\ & \mathrm{C} \\ & 9 \\ & 3 \\ & \mathrm{~B} \\ & 1 \end{aligned}$ | TIC <br> A <br> M <br> 1/ <br> TRI <br> F | $\begin{gathered} \hline \mathbf{S} \\ \mathrm{T} \\ \mathrm{~A} \\ \mathrm{~T} \\ \mathbf{1} \end{gathered}$ | $\begin{aligned} & \hline \mathrm{S} \\ & \mathrm{~T} \\ & \mathrm{~A} \\ & \mathrm{~T} \\ & \mathbf{2} \end{aligned}$ | $\begin{aligned} & \mathrm{I} \\ & \mathrm{~F} \\ & \mathrm{~N} \\ & \mathrm{~A} \\ & \mathrm{R} \\ & 1 \end{aligned}$ | $\begin{gathered} \mathrm{R} \\ \mathrm{~A} \\ \mathrm{G} \\ \mathbf{1} \end{gathered}$ | $\begin{aligned} & \mathrm{R} \\ & \mathrm{~A} \\ & \mathrm{G} \\ & \mathbf{2} \end{aligned}$ | $\begin{aligned} & \mathrm{I} \\ & \mathrm{~F} \\ & \mathrm{~N} \\ & \mathrm{~A} \\ & \mathrm{R} \\ & 2 \end{aligned}$ | $\begin{aligned} & \mathrm{T} \\ & \mathrm{~L} \\ & \mathrm{R} \\ & \mathbf{3} \end{aligned}$ | $\begin{aligned} & \hline I \\ & R \\ & F \\ & 7 \end{aligned}$ | I R F 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| deafness autosomal recessive 242 | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| leukemia |  | X |  | X |  |  |  |  |  |  |  |  | X |  |  | X |  |  |  |  |  |  |  |  |
| sarcoidosis 1 |  |  | X |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| hartnup disorder |  |  |  |  | X |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| papilloma |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |
| viral infectious disease |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  | X | X |
| ```severe acute respiratory syndrome``` |  |  |  |  |  |  |  | X |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| malaria |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |
| influenza |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  | X |  |  |  |  |  |  | X |
| asthma |  |  |  |  |  |  |  |  |  |  | X |  | X |  |  |  |  |  |  |  |  |  |  |  |
| fever |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  | X |  |  |  |  |  | X |  |
| mouth disease |  |  |  |  |  |  |  |  |  |  | X |  | X |  |  | X |  |  |  |  |  |  |  | X |
| herpes simplex |  |  |  |  |  |  |  |  |  |  |  | X |  | X | X |  |  |  |  |  |  | X |  |  |
| encephalopathy acute infection induced |  |  |  |  |  |  |  |  |  |  |  | X |  | X | X |  |  |  |  |  |  | X |  |  |
| encephalitis |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X |  |  |  |  |  |  |  | X |  |
| mumps |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  | X |  |  |  |
| rabies |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  | X |  |  |
| hepatitis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  | X | X | X | X |
| combined immunodeficienc y x linked |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |
| immune deficiency disease |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |
| combined cellular and humoral immune defects with granulomas |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |
| severe combined immunodeficienc y |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |
| malignant histiocytosis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |
| measles |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |
| kaposi sarcoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |
| pediatric lymphoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |
| human immunodeficienc y virus type 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  | X |
| COVID-19 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

