**Supplementary Data**

**Supplementary data Table 1.**

Results of lymphocyte subsets, immunoglobulin, HIV, total Pneumococcal and Haemophilus IgG for Case 1 and 2. Normal ranges in brackets. (N/A = not available)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Case 1 pre IFNγ** | **Case 1 during IFNγ** | **Case 1 post IFNγ** | **Case 2 pre IFNγ** | **Case 2 during IFNγ** | **Case 2 post IFNγ** |
| **White cell count x109/l****(4.0-11.0)** | 8.0 | 7.5 | 12.6 | 10.3 | 12.3 | 9.1 |
| **Monocytes x109/l** **(0.2-1.0)** | 1.1 | 0.9 | 1.1 | 0.9 | 1.3 | 1.1 |
| **Lymphocytes cells/mm3****(1500 -4000)**  | 1500 | 1800 | 1.1 | 1.7 | 2.1 | 1.8 |
| **CD3+ cells/mm3****(700-2100)** | 650 | 730 | N/A | 1330 | N/A | 1460 |
| **CD3+CD4+cells/mm3****(200-900)** | 510 | 570 | N/A | 710 | N/A | 580 |
| **CD3+CD8+ cells/mm3****(200-900)** | 140↓ | 140↓ | N/A | 540 | N/A | 840 |
| **CD19+ cells/mm3****(100-500)** | 450 | 570 | N/A | 150 | N/A | 90↓ |
| **NK cells (CD16/56+) cells/mm3****(60-600)** | 360 | 450 | N/A | 170 | N/A | 160 |
| **IgG g/l** **(6-16)** | 7.0 | N/A | N/A | 12.2 | N/A | N/A |
| **IgA g/l** **(0.8-2.8)** | 1.5 | N/A | N/A | 4.6↑ | N/A | N/A |
| **IgM g/l** **(0.5-1.9)** | 0.3↓ | N/A | N/A | 0.3↓ | N/A | N/A |
| **Pneumococcal IgG u/ml** **(>20)**  | >340 | N/A | N/A | 56.7 | N/A | N/A |
| **Haemophilus B IgG u/ml****(>0.15)** | 0.58 | N/A | N/A | 0.21 | N/A | N/A |
| **Tetanus IgG iu/ml****(>0.01)** | >4 | N/A | N/A | >4 | N/A | N/A |
| **HIV 1 & 2 antibody/P24 Ag** | Negative |  |  | Negative |  |  |

**Supplementary Figure 1.**

IFN-γ detected in whole blood supernatant after incubation with cell medium only for 16 hours. Control values based on 27 healthy controls, bar indicates mean.



**Supplementary Figure 2.**

Patient lithium heparin whole blood samples are able to produce TNFα in response to LPS stimulation that is comparable with controls. Data suggests that the acquired deficit is specific to IFN-γ.

