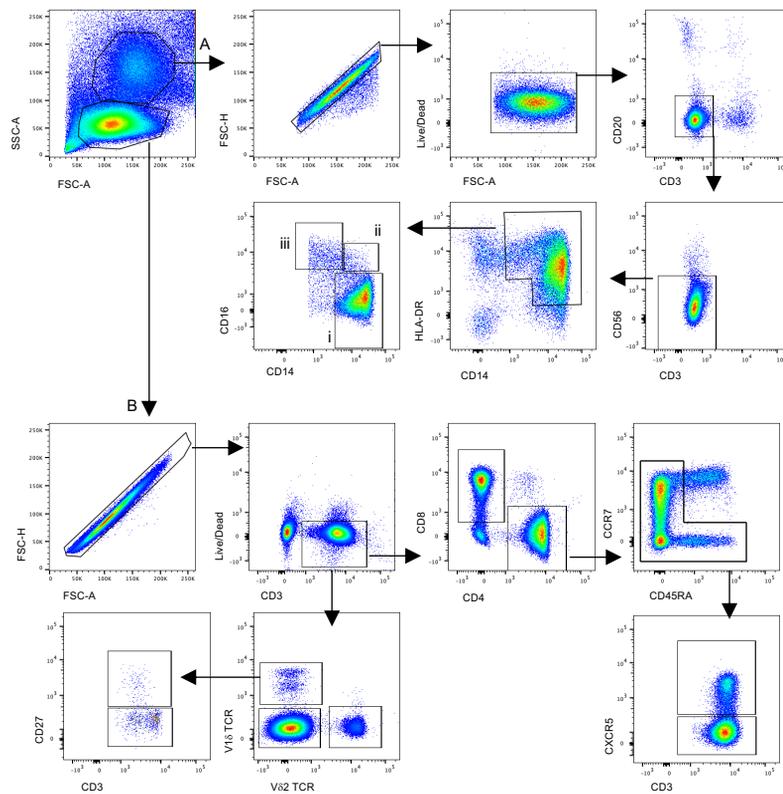


# Supplementary figure 1



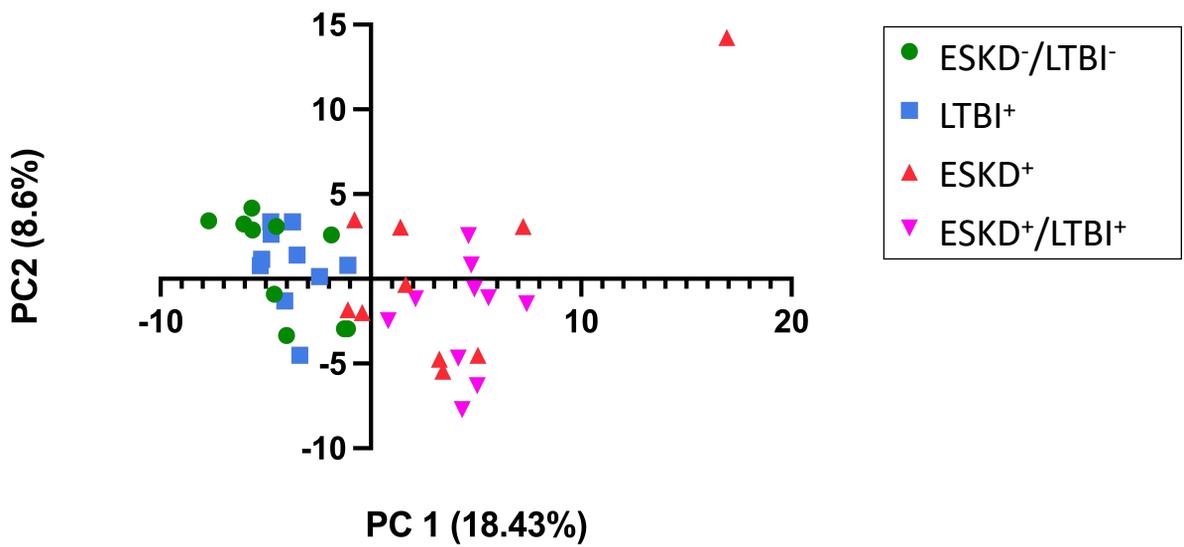
**Supplementary figure 1.** Flow cytometry gating strategy. Monocytes (A) and lymphocytes (B) were identified by forward and side scatter (FSC vs SSC). After exclusion of doublets and dead cells, monocytes were identified as CD3<sup>-</sup>CD20<sup>-</sup>CD56<sup>-</sup>HLA-DR<sup>+</sup>CD14<sup>+</sup> cells, and further categorized as (i) CD14<sup>+</sup>CD16<sup>-</sup>, (ii) CD14<sup>+</sup>CD16<sup>+</sup> or (iii) CD14<sup>+</sup>CD16<sup>++</sup>. (B) After exclusion of doublets and dead cells, gamma delta T cells were defined as CD3<sup>+</sup>Vδ1<sup>+</sup>TCR<sup>+</sup> or Vδ2<sup>+</sup>TCR<sup>+</sup>, with phenotyping for CD27 expression. Conventional T cells were identified as CD8<sup>+</sup> or CD4<sup>+</sup>. CD4<sup>+</sup> T cells were categorized as naïve (CCR7<sup>+</sup>CD45RA<sup>+</sup>) or non-naïve, which included cTFH cells (CXCR5<sup>+</sup>).

# Supplementary table 1

**Supplementary table 1.** 23 out of 141 Discoveries from volcano plot utilizing a False-Discovery Rate approach. *P*-value was corrected for multiple comparisons using the Corrected FRD Method. Desired FDR (Q) 1.00%.

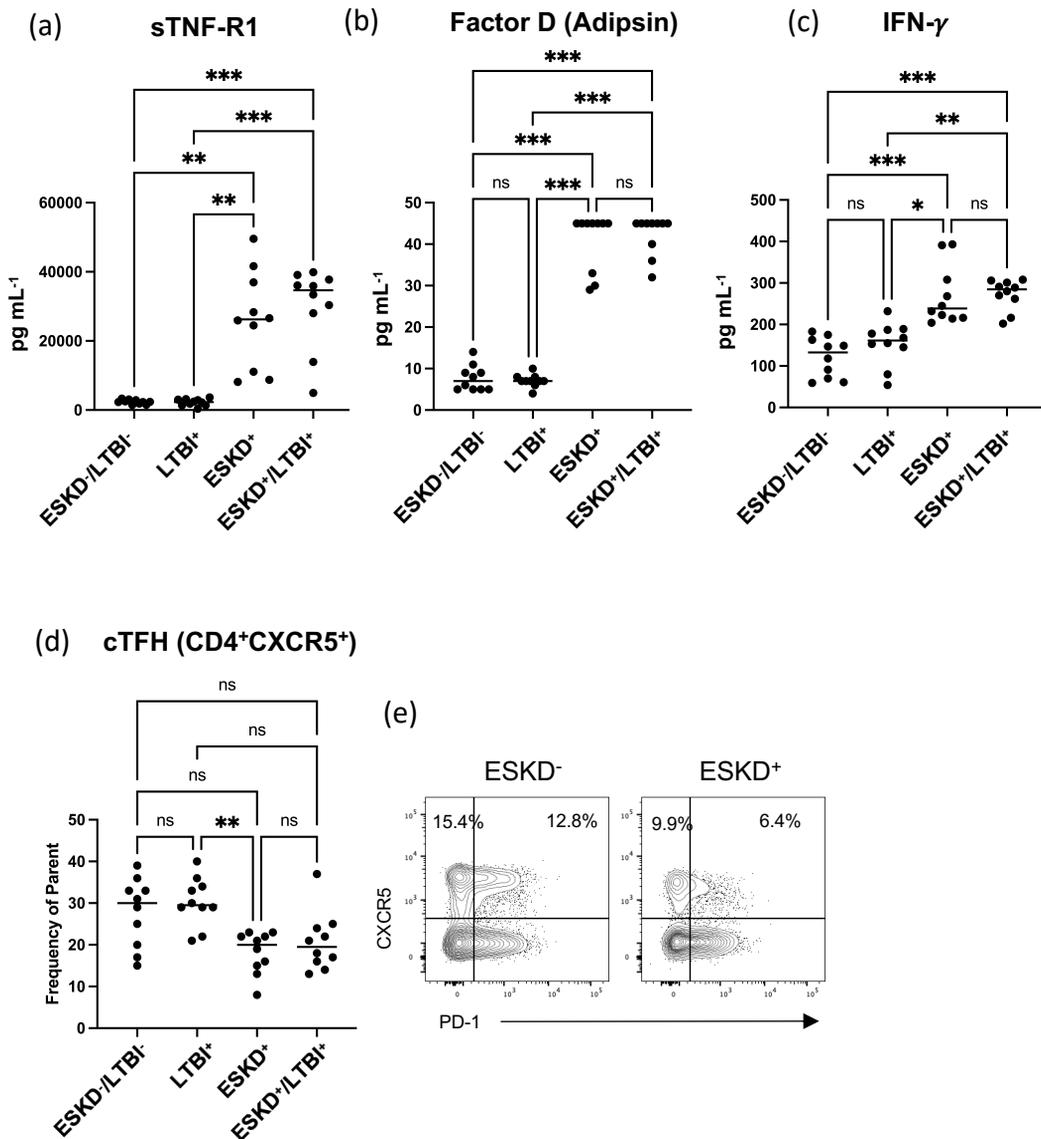
	<i>P</i> -value	Mean of ESKD- (log transformed)	Mean of ESKD+ (log transformed)	Difference	SE of difference	<i>t</i> -ratio	df	<i>q</i> -value
<b>Factor D (Adipsin)</b>	<0.000001	1.956	3.715	-1.759	0.07726	22.77	38.00	<0.000001
<b>sTNF-R1</b>	<0.000001	7.648	10.09	-2.442	0.1823	13.39	38.00	<0.000001
<b>sTNF-R2</b>	<0.000001	7.193	9.068	-1.876	0.1746	10.74	38.00	<0.000001
<b>APRIL</b>	<0.000001	11.45	14.22	-2.770	0.2841	9.748	38.00	<0.000001
<b>sCD30</b>	<0.000001	6.784	7.755	-0.9715	0.1164	8.347	38.00	<0.000001
<b>TSLP</b>	<0.000001	4.538	5.156	-0.6181	0.08561	7.220	38.00	0.000002
<b>IL-12(p40)</b>	<0.000001	5.517	5.921	-0.4044	0.05641	7.169	38.00	0.000002
<b>IFN-<math>\gamma</math></b>	<0.000001	4.841	5.583	-0.7418	0.1097	6.760	38.00	0.000005
<b>IL-2</b>	<0.000001	2.198	3.162	-0.9636	0.1479	6.516	38.00	0.000010
<b>MMP-3</b>	0.000002	8.810	9.345	-0.5353	0.09664	5.539	38.00	0.000190
<b>Osteocalcin</b>	0.000004	8.669	10.10	-1.435	0.2683	5.349	38.00	0.000315
<b>Pentraxin-3</b>	0.000026	7.625	8.531	-0.9059	0.1896	4.779	38.00	0.001719
<b>IL-29/IFN-n1</b>	0.000045	4.295	4.953	-0.6580	0.1428	4.608	38.00	0.002683
<b>cTFH Frequency</b>	0.000062	3.336	2.911	0.4247	0.09428	4.505	38.00	0.003425
<b><math>\gamma\delta</math>1 T cell frequency</b>	0.000069	1.383	-0.3294	1.712	0.3834	4.465	38.00	0.003611
<b>CX3CR1 MFI on CD14<sup>+</sup>CD16<sup>-</sup> monocytes</b>	0.000081	7.860	8.227	-0.3677	0.08330	4.414	38.00	0.003957
<b>G2f %Area</b>	0.000122	2.426	1.812	0.6137	0.1434	4.279	38.00	0.005431
<b>G0 total</b>	0.000125	1.227	1.939	-0.7119	0.1667	4.271	38.00	0.005431
<b>CD4<sup>+</sup> T cells, Frequency of CD27<sup>+</sup> T<sub>EM</sub></b>	0.000147	1.900	2.945	-1.045	0.2476	4.218	38.00	0.006028
<b>Osteopontin</b>	0.000186	12.36	13.80	-1.434	0.3463	4.141	38.00	0.007236
<b>IL-26</b>	0.000196	5.746	6.504	-0.7581	0.1839	4.122	38.00	0.007239
<b>IFN-a2</b>	0.000204	4.039	4.416	-0.3765	0.09163	4.109	38.00	0.007239
<b>IL-28A/IFN-n2</b>	0.000228	2.664	3.347	-0.6826	0.1677	4.071	38.00	0.007744

## Supplementary figure 2



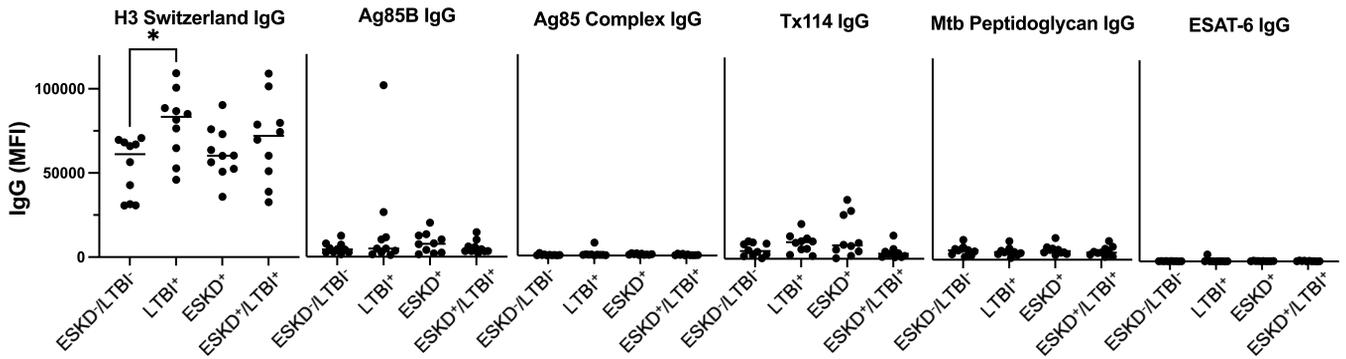
**Supplementary figure 2.** Multivariate unsupervised LASSO Principal Component (PC) Analysis (PCA) of ESKD<sup>-</sup>/LTBI<sup>-</sup> ( $n = 10$ ; green), LTBI<sup>+</sup> ( $n = 10$ ; blue), ESKD<sup>+</sup> ( $n = 10$ ; red) and ESKD<sup>+</sup>/LTBI<sup>+</sup> groups ( $n = 10$ ; pink)

# Supplementary figure 3



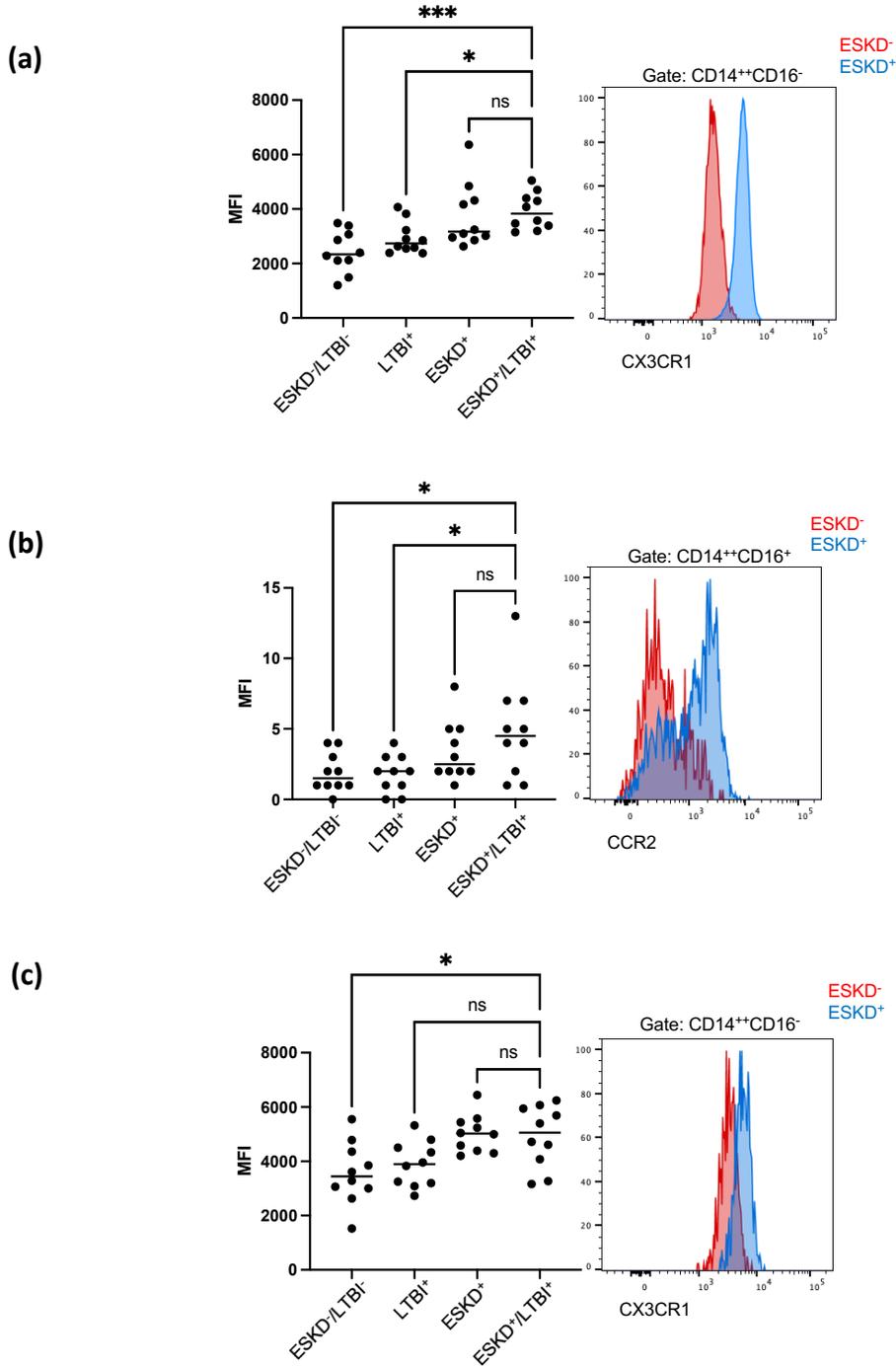
**Supplementary figure 3.** Individual plots of 4 key features selected by LASSO PCA analysis (sTNF-R1 **(a)**, Factor D (Adipsin) **(b)**, IFN- $\gamma$  **(c)** and cTFH (CD4<sup>+</sup>CXCR5<sup>+</sup>) Frequency **(d)**) comparing pg mL<sup>-1</sup> in each respective group (ESKD<sup>-</sup>/LTBI<sup>-</sup> ( $n = 10$ ), LTBI<sup>+</sup> ( $n = 10$ ), ESKD<sup>+</sup> ( $n = 10$ ), ESKD<sup>+</sup>/LTBI<sup>+</sup> ( $n = 10$ ); total  $n = 40$ ). Median of each group shown as line bar in plots. **(e)** Separation of PD1<sup>+</sup> (x-axis) and CXCR5<sup>+</sup> (y-axis) CD4<sup>+</sup> TFH cells via cell-plots.

## Supplementary figure 4



**Supplementary figure 4.** Multiplex assay univariate analysis reporting mean fluorescence intensity (MFI; linear scale) of Influenza and TB-specific IgG in ESKD<sup>-</sup>/LTBI<sup>-</sup> ( $n = 10$ ), LTBI<sup>+</sup> ( $n = 10$ ), ESKD<sup>+</sup> ( $n = 10$ ), ESKD<sup>+</sup>/LTBI<sup>+</sup> ( $n = 10$ ). Line bar indicates median. 5 antigens chosen to represent total of 16 assessed due to these five antigens representing internal and external TB antigens. 11 other antigens had similar MFIs and were not significant.

# Supplementary figure 5



**Supplementary figure 5.** Monocyte staining of CXCR1<sup>+</sup> and CCR2<sup>+</sup> phenotypes. **(a)** Individual plots of MFI values for expression of CX3CR1<sup>+</sup> on CD14<sup>++</sup>CD16<sup>-</sup> monocytes in ESKD<sup>-</sup>/LTBI<sup>-</sup> ( $n = 10$ ), LTBI<sup>+</sup> ( $n = 10$ ), ESKD<sup>+</sup> ( $n = 10$ ) and ESKD<sup>+</sup>/LTBI<sup>+</sup> ( $n = 10$ ). Gating compared MFI in ESKD<sup>-</sup> ( $n = 20$ ) to ESKD<sup>+</sup> ( $n = 20$ ). **(b)** Demonstrates expression of CCR2<sup>+</sup> on CD14<sup>++</sup>CD16<sup>+</sup> monocytes while **(c)** demonstrates CX3CR1<sup>+</sup> expression on CD14<sup>++</sup>CD16<sup>-</sup> monocytes.