## Dynamics of the immune response in acute hepatitis B infection

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**Supplementary figure 1. Gating strategies used to analyse phenotype and function of NK cells.** Gating as displayed was used for both CD56<sup>dim</sup> NK cells and CD56<sup>bright</sup> NK cells. FSC, Forward-scatter; SSC, side-scatter.



Supplementary figure 2 (part I). Proportion of effector and memory CD8+ T cells expressing various markers. NK cells from patients with acute HBV infection (n=9) as well as 9 healthy controls (HC) were analysed using immune phenotyping by flowcytometry. The Mann-Whitney U test was used to determine statistical significance. ns, non-significant; \*\*\*\*, p < 0.0001; \*\*, p < 0.01.



Supplementary figure 2 (part II) Proportion of effector and memory CD8+ T cells expressing various markers NK cells from patients with acute HBV infection (n=9) as well as 9 healthy controls (HC) were analysed using immune phenotyping by flowcytometry. The Mann-Whitney U test was used to determine statistical significance. ns, non-significant; \*\*\*\*, p < 0.0001; \*\*\*, p < 0.001; \*\*\*, p < 0.01.



Supplementary figure 3. Proportion of CD56<sup>bright</sup> and CD56<sup>dim</sup> NK cells expressing differentiation markers NKG2A (A,B) and CD57 (C,D) does not significantly change through the course of infection. NK cells from patients with acute HBV infection (n=9) as well as 8 healthy controls (HC) were analysed using immune phenotyping by flowcytometry. The Mann-Whitney U test was used to determine statistical significance. ns, non-significant. peptide pools: X, x protein; C, core protein; E, envelope protein; PI, polymerase protein pool I; PII, polymerase protein pool II



Supplementary figure 4. Proportion of NK cells that produce IFNy is elevated in patients with AHB infection as compared to healthy controls (HC). Cytokine production, after IL-12 and IL-15 stimulation, of NK cells from patients with acute HBV infection (n=9) as well as 6 healthy controls (HC) were analysed using immune phenotyping by flowcytometry. Mann-Whitney U test and Wilcoxon test were used to determine statistical significance. Healthy controls, HC; ns, non-significant; \*\*, p < 0.01. Patient 1 ( $\Box$ ), patient 2 (|), patient 3 ( $\bullet$ ), patient 4 ( $\blacksquare$ ), patient 5 ( $\diamond$ ), patient 6 ( $\nabla$ ), patient 7 ( $\nabla$ ), patient 8 ( $\diamond$ ), patient 9 (O), and healthy controls ( $\bullet$ ).



Supplementary figure 5. CD4+ T cell responses to HBV genotype A peptides was lower in the patient that that did not clear the virus spontaneously compared to patients that did. TNF $\alpha$ , IL-2, MIP-1 $\beta$  and IFN- $\gamma$  production by HBVspecific CD4+ T cells after stimulation with a HBV-peptide libary in 4 patients who cleared AHB infection (A-D) and 1 patient who evolved to chronicity (E). Analysed using immune phenotyping by flowcytometry. Peptide pools: X, x protein; C, core protein; E, envelope protein; PI, polymerase protein pool I; PII, polymerase protein pool II.