

SUPPLEMENTAL FIGURE 1. Gating strategy for T cell responses. Multi-parameter flow cytometry was used to assess PPD- or 85A/b-specific T cell responses. Shown is the gating strategy used to identify cytokine- or granzyme B-producing CD4 (green) and CD8 (orange) T cells in the PBMC (*A*) or BAL (*B*) of a representative animal immunized with BCG/AERAS-402, 3 wks post-boost. Staining panels are listed within shaded areas.



SUPPLEMENTAL FIGURE 2. Hierarchy of insert-specific responses generated by AERAS-402 immunization and the quality of cellular immune responses over time. (*A*) Data generated in a previous study (21) showing CD4 (*left*) and CD8 (*right*) T cell responses to Ag85A or TB10.4 peptides in BAL, 2 and 4 wks after AE (1×10^{10}) or i.m. (1×10^{11}) immunization with AERAS-402. Interquartile range (shaded box) and median (black line) of individual responses (n = 4 per group) are indicated. (*B*) Pie charts depict the fraction of total cytokine-producing memory CD4 or CD8 T cells (shown in Fig. 2 and 3) in PBMC (*left*) or BAL (*right*) expressing any combination of IFN- γ , IL-2, or TNF in response to PPD or Ag85A/b peptides 3, 9, and 11 wks after BCG priming and/or 3 and 10 wks after the Ad35-null or AERAS-402 boost. Gray pie arcs indicate the proportion of IFN- γ -producing cells. Pies represent the average of 8 animals per group and are the shown only for groups and time points with measurable total cytokine frequencies. NS: Not significant.



SUPPLEMENTAL FIGURE 3. Individual NHP weights for the duration of the study. Data shown are the percent of starting weight for each individual NHP in each vaccine group from the time of the first immunization (wk 0) through the time of necropsy. Dotted line indicates 100% of starting weight, dashed line indicates the time of challenge (26 wks), and red lines indicate animals that required an early, unscheduled necropsy (rapid progressors).



SUPPLEMENTAL FIGURE 4. **Histopathology and post-challenge clinical data.** (*A*) The percent of each lung lobe containing lesions (granulomatous inflammation, necrosis, hemorrhage, or edema) based on histopathologic analysis. Each vaccine group is shown on a separate graph with data segregated by whether the animal was a rapid progessor (shaded area) or survivor (unshaded area), as in Fig. 5. Gray bars indicate the mean score. (*B*) Average albumin and globulin levels in serum (with SEM) over time for each vaccine group, excluding rapid progressors. Area under the curve values with interquartile range and mean are plotted at lower right. * $p \le 0.05$ compared to the Ctrl group by *t*-test.