TUBERCULOSIS
LESSON 1: GOOD NEWS! TB KILLER ON THE LOOSE!
Activity B: *Getting "Graphic" with TB!*

TEXAS BIOMEDICAL
**R E S E A R C H I N S T I T U T E**
HEALTH STARTS WITH SCIENCE
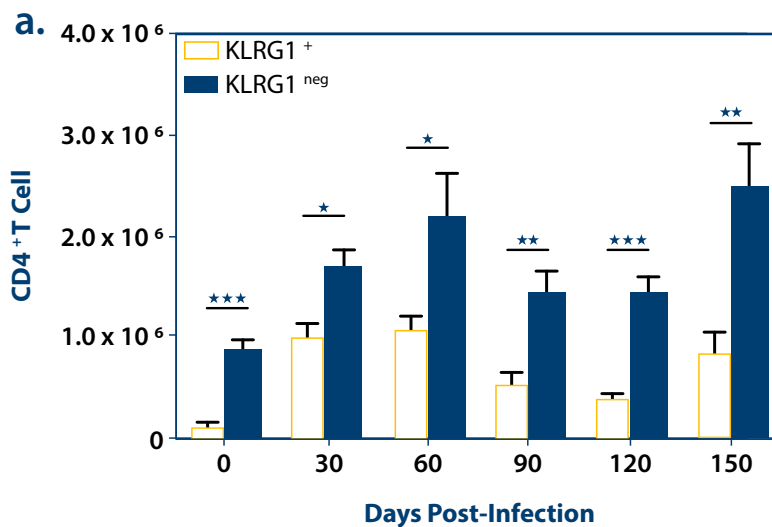
This figure shows the correlation between the KLRG1 receptor and effectiveness of CD4+ receptors against Mycobacterium tuberculosis infection.

1. What trends or predictive patterns do you notice on the graph?

2. Looking at the graph, describe the correlation or relationship between KLRG and CD4+.

3. Gamma interferon is produced by CD4+ receptors. Looking at the bar graph, predict which mice (wild type or KLRG-/-) would be better able to defend against TB bacterial infection. Explain your response.

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a.
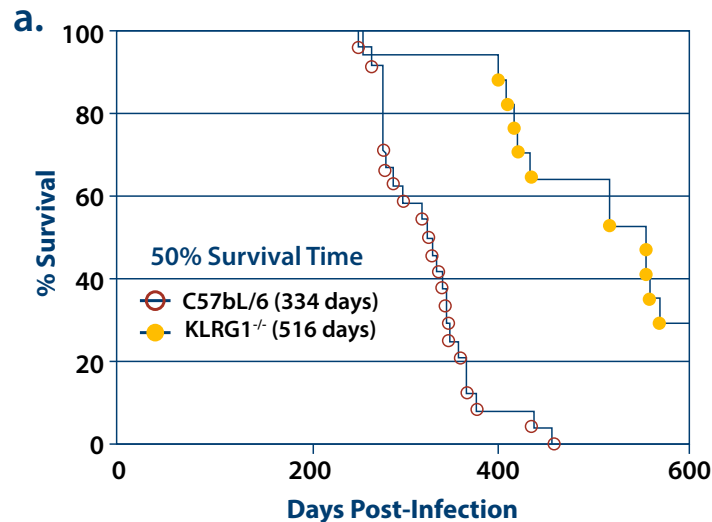
4. What do you notice about the survival rates between the wild-type mice and KLRG1 -/- mice?

5. This experiment ended at 600 days. If it were extended another 100 days, draw the extended survival curve. Explain your rationale.

6. What do these data indicate about the body's natural defenses against TB and why scientists continue to seek treatments against this bacterial infection?

7. The scientists hypothesized KLRG receptors interfered with the release of gamma interferon from the CD4+ receptors. Based on these data from the whisker plot graph and line graph, did the scientists support or not support their hypothesis? Explain.