

## Concepts in Basic Sciences and Translational Research

1. Which step in the HIV lifecycle is key to HIV persistence in the body?
  - a. Assembly of new HIV viruses
  - b. Integration of HIV's genetic material into cell's genome
  - c. Neither
  - d. Manufacture of HIV proteins
2. Do current anti-HIV drugs eradicate HIV? Why/why not?
  - a. No. Not effective enough.
  - b. Yes. It limits detection.
  - c. No. Integrated HIV is not recognized by anti-HIV drugs
  - d. Yes. Virus suppresses replication.
3. Which types of cells explain why latent HIV persists despite HAART?
  - a. CD4+ T cells
  - b. HIV virions
  - c. HIV RNA
  - d. CD8+ T cells
4. Naïve CD4+ T cell production is \_\_\_\_\_ at birth and \_\_\_\_\_ in adulthood.
  - a. Minimal; Increases
  - b. Maximal; Increases
  - c. Minimal; Declines
  - d. Maximal; Declines
5. In latency, when does the virus become active again?
  - a. When CD4+ T cells re-activate
  - b. CD4+ T cells remain stable
  - c. They do not become active
  - d. When CD4+ T cells multiply

6. HIV persists in only one location in the body.
  - a. True
  - b. False
  
7. Which of these is established rapidly after infection?
  - a. Antibodies
  - b. Reservoir
  - c. Protein channels
  - d. CD4+ T cells
  
8. According to several clinical trials, HDAC inhibitors can \_\_\_\_\_ latent HIV.
  - a. Deactivate
  - b. Trap
  - c. Reactivate
  - d. HDAC inhibitors do not serve a purpose
  
9. CD4+ T cells respond to signals from the environment via where?
  - a. Receptors on cells' surface
  - b. Receptors located in cells' inner energy source
  - c. Receptors on neighboring cells' surface
  - d. None of the above
  
10. Which one of these is a currently identified negative regulator?
  - a. PD-LL
  - b. PD-L3
  - c. PD-L2
  - d. PD-1

**Answer Key**

<b>B</b>	<i>Answer can be found on slide 3</i>
<b>C</b>	<i>Answer can be found on slide 4</i>
<b>A</b>	<i>Answer can be found on slide 5</i>
<b>D</b>	<i>Answer can be found on slide 8</i>
<b>A</b>	<i>Answer can be found on slide 9</i>
<b>FALSE</b>	<i>Answer can be found on slide 11</i>
<b>B</b>	<i>Answer can be found on slide 16</i>
<b>C</b>	<i>Answer can be found on slide 20</i>
<b>A</b>	<i>Answer can be found on slide 24</i>
<b>D</b>	<i>Answer can be found on slide 25</i>