Recommendations for consideration by SAGE
Based on currently available data, a single dose of yellow fever vaccine appears to confer life-long protective immunity against yellow fever disease. Therefore, a booster dose of yellow fever vaccine is not needed to maintain immunity.

However, further study is needed in certain groups, who may have suboptimal seroconversion rates following a single dose of the vaccine to determine if they may benefit from a single booster dose.
Use of YF vaccine in people ≥60 years old

- A risk assessment should take into account risk of acquiring yellow fever disease versus the risk of a potential adverse event following immunization.

- Vaccination should be recommended with caution and based on a risk-benefit assessment for any person ≥60 years of age who has not been vaccinated.
Use of YF vaccine in HIV-infected persons

- Note changes recommended in existing 2003 YF position paper

- Yellow fever vaccine is contraindicated for severely immunocompromised persons, including persons with AIDS or CD4+ counts < 200 cells/mm³.

- Yellow fever vaccination may be offered to asymptomatic HIV-infected persons with CD4+ counts ≥200 cells/mm³ who require vaccination.

- Additional data on safety & immunogenicity should be obtained on the effect of vaccination in HIV-positive individuals.
Use of YF vaccine in persons with immunocompromising conditions (other than HIV)

- Note clarifications recommended in existing 2003 YF position paper, but further clarify immunocompromising conditions
Use of YF vaccine in persons with immunocompromising conditions (other than HIV)

Conditions and treatments that would be considered severely immunocompromising include: *i)*. certain 1° immunodeficiencies, *ii)*. thymus disorder, *iii)*. symptomatic HIV-infection or CD4+ T-lymphocyte values < 200 per mm³, *iv)*. malignant neoplasm, *v)*. recent hematopoietic stem cell transplantation, *vi)*. use of drugs with known immunosuppressive or immunomodulatory properties, (e.g., high-dose systemic corticosteroids, alkylating drugs, antimetabolites, TNF-α inhibitors, IL-1 blocking agent, or other monoclonal antibodies targeting immune cells), and *vii)*. current or recent radiation therapies targeting immune cells.
• Currently available data suggest that there is minimal impact on the reactogenicity and immunogenicity when YF vaccine is co-administered with other vaccines, with one notable exception; the co-administration of YF vaccine and MMR vaccine in young children, where immunogenicity appears to be compromised against several antigens.

• Additional studies are warranted on the co-administration of YF vaccine and other vaccines, in particularly MMR and meningococcal A vaccines.
• Transmission of YF vaccine virus by breastfeeding.

• Efficacy of YF and meningococcal vaccines when co-administered in EPI.

• Efficacy of YF and MMR vaccines when co-administered in EPI.

• Efficacy of YF and OPV vaccines when co-administered in EPI.
Impact of vaccination strategies on YF control

• Control strategy for yellow fever should include sound epidemiologic surveillance and delivery of yellow fever vaccine through a complementary and optimized combination of EPI and mass preventive campaigns. Reactive campaigns should be conducted in response to yellow fever outbreaks if there is inadequate vaccination coverage within the population.
Research questions

- Safety and immunogenicity of YF vaccine in persons with advanced AIDS
- Safety of YF vaccine in people ≥60 years.
- Safety of YF vaccine in people with immunocompromising conditions.