

# Special Issue for CURRENT HIV RESEARCH

Guest Editor: Miguel E. Quiñones-Mateu, Ph.D.

## Use of Microbicides to Prevent HIV Sexual Transmission

### Aim and Scope:

Most HIV infections are acquired during sexual contact, across the genital or rectal mucosal epithelium; thus, HIV preventive strategies such as behavioral and structural interventions (e.g., counseling and condom use) or pre-exposure prophylactic (e.g., topical microbicides or the oral administration of antiretroviral drugs) are the only effective methods against the establishment of systemic HIV infection. The recent success of the CAPRISA 004 phase II clinical trial using a tenofovir gel not only provided the proof-of-concept for reverse transcription inhibitor (RTI)-based vaginal microbicides but also demonstrated the actual possibility to use microbicides to prevent sexual HIV transmission. This review will examine the latest, and future, studies aimed to the development of novel strategies to block HIV transmission.

**Keywords:** HIV, microbicide, prevention, antiretroviral therapy

### List of Subtopics and Authors:

| Topic   | Contributor(s)  |
|---|---|
| 1. Editorial  | Miguel E. Quiñones-Mateu (Case Western Reserve University, USA)   |
| 2. Mucosal HIV Transmission                           | Denis Tebit (Case Western Reserve University, USA)<br>Nicaise Ndembi (Institute of Human Virology, Nigeria)<br>Miguel E. Quiñones-Mateu (Case Western Reserve University, USA)                      |
| 3. Non-specific Microbicides                          | Lut Van Damme (Family Health International, USA)  |
| 4. Entry Inhibitors as Microbicides                   | Richard Gibson (Case Western Reserve University, USA)<br>Eric J. Arts (Case Western Reserve University, USA)  |
| 5. RT Inhibitors as Microbicides                      | Jurgen Joossens (University of Antwerp, Belgium)<br>Koen Augustyns (University of Antwerp, Belgium)<br>Jan Heeres (University of Antwerp, Belgium)<br>Paul J. Lewi (University of Antwerp, Belgium) |
| 6. Integrase Inhibitors as Microbicides               | Marco Radi (University of Siena, Italy)<br>Maurizio Botta (University of Siena, Italy)<br>Roberto Di Santo (University of Rome, Italy)  |
| 7. Protease Inhibitors as Microbicides                | Robin J. Shattock (Imperial College, UK)<br>Carolina Herrera (Imperial College, UK)   |
| 8. Combination of ARV as Microbicides                 | Jan Balzarini (KULeuven, Belgium)<br>Dominique Schols (Rega Institute, Belgium)   |
| 9. Natural Peptides as Microbicides                   | Alexander M. Cole (University of Central Florida, USA)  |
| 10. Ex Vivo Models to Study Microbicides              | Kevin K. Arien (Institute of Tropical Medicine, Belgium)  |
| 11. Animal Models to Study Microbicides               | Ronald S. Veazey (Tulane University, USA)   |
| 12. Formulation and Delivery of Microbicides          | Lisa C. Rohan (Magee-Womens Res. Institute, USA)  |
| 13. Stages in the Development of Microbicides         | Robert W. Buckheit Jr. (ImQuest BioSciences, USA)   |
| 14. Ethical Issues in Microbicide Clinical Trials     | Robert A. Salata (Case Western Reserve University, USA)<br>Angelina K. Gangestad (University Hospital Case Medical Center, USA)<br>Patricia Marshall (Case Western Reserve University, USA)         |
| 15. Future Prospects and Perspectives on Microbicides | Kevin Arien (Institute of Tropical Medicine, Belgium)<br>Miguel E. Quiñones-Mateu (Case Western Reserve University, USA)<br>Guido Vanham (Institute of Tropical Medicine, Belgium)                  |

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