

WHO Advisory Committee on Variola Virus Research

Report of the Ninth Meeting

Geneva, Switzerland
29 –30 November 2007

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Executive summary

The major accomplishments in the Variola virus research programme presented to the Committee were as follows:

- A new smallpox vaccine (ACAM 2000) has been licensed for use in one Member State.
- One attenuated smallpox vaccine (LC16m8), which has been licensed for use in one Member State since 1974, is being evaluated further in clinical trials for possible widespread use in smallpox prophylaxis.
- One vaccine (Imvamune®), which has the potential for use in individuals with contraindications to receiving 1st or 2nd generation vaccines, has performed satisfactorily in phase I and II clinical trials and will shortly be entering phase III trials.
- Two drugs displaying therapeutic activity in non-human primate models using Variola virus (cidofovir and ST-246), that target different proteins made at different stages during the Variola virus replication cycle, have been further developed and are available for emergency use.
- One drug, ST-246, which has passed phase I clinical trials, was used to treat an accidental, life-threatening case of eczema vaccinatum with subsequent recovery of the patient. Treatment with ST-246 was initiated sequentially after initiation of vaccinia immunoglobulin (VIG) and cidofovir. The potential of this drug for the treatment of related orthopoxvirus infections, such as monkeypox in man, is to be investigated.

The Advisory Committee noted that several time-limited research programmes, that had been approved by WHO, are nearing completion. The investigators involved in this research have been requested to submit final reports on completed research, or new proposals if further research is deemed necessary.

Contents

| | |
|---|----|
| 1. Introduction | 1 |
| 2. Report of the WHO Secretariat | 1 |
| 3. Update on research proposals submitted to WHO | 2 |
| 4. Update on Variola virus strains held in the repository of the United States of America | 2 |
| 5. Update on Variola virus strains held in the Russian collection | 2 |
| 6. Conservation of DNA and study of molecular evolution of Variola virus | 3 |
| 7. Review of the records which accompanied the Variola virus seeds comprised in the reference collection | 3 |
| 8. Refinement of primate models using Variola to facilitate acceptance of countermeasures for smallpox | 4 |
| 9. ST-246: drug development and human clinical safety studies | 4 |
| 10. ST-246: animal efficacy studies | 5 |
| 11. The critical role of the viral TNF receptor in mousepox | 6 |
| 12. Human B cell responses following smallpox vaccination | 6 |
| 13. Immunogenicity studies of candidate DNA vaccines based on Variola virus genes | 6 |
| 14. Efficacy of MVA and Dryvax vaccines to induce Variola virus neutralizing antibodies | 7 |
| 15. Update on the attenuated MVA vaccine | 8 |
| 16. Epidemiology and non-clinical/clinical evaluation of the LC16m8 vaccine | 8 |
| 17. Regulatory issues about licensing 3rd generation vaccines | 9 |
| 18. Preliminary characterization of a collection of monoclonal antibodies generated against expressed Vaccinia virus proteins, and their recognition of Variola virus | 10 |
| 19. Use of VIG, cidofovir and ST-246 in the treatment of a severe case of eczema vaccinatum | 10 |
| 20. Preliminary results from the study of the natural history of human monkeypox in the Democratic Republic of the Congo | 11 |
| 21. Composition of the Scientific Sub-Committee for the evaluation of research proposals | 11 |
| 22. Review of the research work done by laboratories that have obtained limited regions of Variola virus DNA with WHO approval | 12 |

| | |
|--|----|
| 23. Variola virus DNA: third party transfers | 12 |
| 24. Information on the operational procedures for the release of the WHO vaccine stockpile and operational aspects for the establishment of regional surge diagnostic capacity | 13 |
| Annex 1. Agenda | 14 |
| Annex 2. List of participants | 17 |

1. Introduction

- 1.1 Dr David Heymann welcomed participants, particularly the new members, to the ninth meeting of the Advisory Committee on Variola Virus Research on behalf of the WHO Director-General. He drew comparisons with the work of this Committee and that concerned with the eradication of poliovirus and noted that reciprocal lessons could be learnt. He also noted that encouraging progress was being made in the area of research involving live Variola virus.
- 1.2 Dr Heymann concluded by stating that the World Health Assembly (WHA) had requested this Committee to undertake a review of the approved research programme in 2010 for presentation to the 64th WHA in 2011. This report would provide the basis for further discussions on the terms and timelines for the destruction of the remaining stocks of live Variola virus.
- 1.3 Dr Cathy Roth reminded the Committee that it was to advise WHO on the essential research which was required involving live Variola virus, and then to monitor the progress of this research. Members should reflect on both the science and the public health impact of the outcomes. The Advisory Committee then elected Professor Geoffrey Smith as chairman and Drs Robert Drillien and Peter Greenaway as rapporteurs.

2. Report of the WHO Secretariat

- 2.1 Dr Daniel Lavanchy reminded participants that the meeting report would be submitted to the WHO Director-General, then to the Executive Board and finally to the WHA. The report should remain confidential until the final version had been posted on the WHO web site.
- 2.2 Dr Lavanchy then stated that the major issue that had emerged since the last meeting of the Committee was the outcome of discussions at the last WHA. He reiterated the requests made to WHO and the Advisory Committee on Variola Virus Research, specifically:
 - A major review of ongoing essential research using live Variola virus and the plans

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