# APPENDIX 1. List of HIV specialists participating in the meetings regarding the management of comorbidities in treated HIV.

## Meeting coordinators

Rafael Rubio García. Hospital 12 de Octubre. Madrid. Santiago Moreno. Hospital Ramón y Cajal. Madrid.

# **HIV Specialists**

Eulalia Valencia. Hospital Universitario La Paz. Madrid.

María Jesús Téllez. Hospital Clínico San Carlos. Madrid.

Ignacio De Los Santos. Hospital La Princesa. Madrid.

Víctor Asensi. Hospital General Oviedo. Asturias.

Ignacio Bernardino. Hospital Universitario La Paz. Madrid

Joaquín Portilla. Hospital General de Alicante

Ana Moreno. Hospital Ramón y Cajal. Madrid

Alberto Terrón. Hospital de Jerez. Cádiz

Juan Carlos López Bernaldo de Quirós. Hospital G. U. G. Marañón. Madrid

Mª Jesús Pérez Elías. Hospital Ramón y Cajal. Madrid

Enrique Bernal. Hospital Universitario Reina Sofía. Murcia

Juan González. Hospital Universitario La Paz. Madrid

José Sanz. Hospital Universitario Príncipes de Asturias. Madrid

José Ramón Blanco. Hospital La Rioja. Logroño

Esteban Martínez. Hospital Clínic. Barcelona

Julián Olalla. Hospital Costa del Sol. Marbella

Jesús Troya. Hospital Infanta Leonor. Madrid

Miguel Torralba. Hospital Universitario Guadalajara. Guadalajara

Ignacio Pérez Valero. Hospital La Paz. Madrid.

Arkaitz Imaz. Hospital de Bellvitge. Barcelona.

Félix Gutiérrez. Hospital de Elche. Alicante.

Pere Domingo. Hospital Sant Pau. Barcelona.

Jose A. Iribarren. Hospital Donostia. San Sebastián.

Celia Miralles. Hospital Alvaro Cunqueiro. Vigo.

Juan E. Losa. Fundación Hospital de Alcorcón. Madrid.

Miguel García Deltoro. Hospital General. Valencia.

Federico Pulido. Hospital 12 de Octubre. Madrid.

Juan Berenguer. Hospital Gregorio Marañón. Madrid.

## **APPENDIX 2. Specific questions**

Six main questions were stated that defined the topics for discussion:

- 1.- What is the current relevance of comorbidities and non-AIDS events in the management of HIV-infected patients?
- 2.- What are the drivers of comorbidities and non-AIDS events in the development of comorbidities and non-AIDS events?
- 3.- What is the impact of comorbidities and non-AIDS events in the management of non-AIDS events?
- 4.- What is the management of the most relevant comorbidities and non-AIDS events?
- 5.- How can we prevent the development comorbidities and non-AIDS events?
- 6.- How will the landscape of comorbidities and non-AIDS events evolve in the future?

## For each topic we defined 10 questions (the first three common to all of them)

- 1.- Are comorbidities and non-AIDS events synonymous when we refer to patients with HIV infection? Could we venture a definition?
- 2.- Is there really an increase in comorbidities and/or non-AIDS events in HIV-infected people compared to the non-HIV-infected population?
- 3.- Is the development of comorbidities/non-AIDS events independent of the age of the patients? Is there a premature risk of comorbidities and/or non-AIDS events?

## **Specific questions for Topic 1**

- 4.- What are the most frequent comorbidities in HIV-infected people?
- 5.- What are the most frequent non-AIDS events in HIV-infected people?
- 6.- To what extent do comorbidities/non-AIDS events condition the overall management of HIV-infected people?
- 7.- To what extent do comorbidities/non-AIDS events condition the quality of life of HIV-infected people?
- 8.- To what extent do comorbidities/non-AIDS events condition the mortality/survival of HIV-infected people?
- 9.- Are there data indicating that the absence/prevention of comorbidities/non-AIDS events improves the prognosis of HIV-infected people?
- 10.- Who should be in charge of comorbidities/non-AIDS events in HIV-infected people?

#### **Specific questions for Topic 2**

- 4.- What is the importance of environmental or lifestyle factors, unrelated to HIV infection, in the development of comorbidities/non-AIDS events?
- 5. What is the importance of antiretroviral drug toxicity in the development of comorbidities/non-AIDS events?
- 6. What is the importance of HIV infection itself in the development of comorbidities/non-AIDS events?
- 7. What factors associated with HIV infection influence the development of comorbidities/non-AIDS events: CD4 nadir, CD4 recovery, CD4/CD8 ratio, peak viral load, virologic suppression?
- 8. What role does systemic inflammation/immunoactivation play in the development of comorbidities/non-AIDS events?
- 9. Is there a role for alteration of the microbiome?
- 10. Does the risk of developing comorbidities/non-AIDS events decrease with antiretroviral therapy?

## **Specific questions for Topic 3**

- 4.- Do comorbidities/non-AIDS events condition a different diagnostic approach in the initial evaluation and follow-up of patients, in all patients or in subgroups of patients?
- 5.- Which diagnostic evaluations related to comorbidities/non-AIDS events should be considered in the initial evaluation and in the follow-up, in all patients or in specific subgroups? How is it justified?
- 6.- Do comorbidities/non-AIDS events condition a higher frequency of office visits? Should they be performed in the HIV specialist office, by other specialists or in Primary Care?
- 7. Do comorbidities/non-AIDS events condition the choice of initial antiretroviral treatment and subsequent changes?
- 8.- What aspects associated with comorbidities/non-AIDS events can determine the choice of antiretroviral treatment?
- 9.- Do comorbidities/non-AIDS events require specific preventive measures related to HIV infection?
- 10.- Do the comorbidities/non-AIDS events trigger general preventive measures?

# **Specific questions for Topic 4**

- 4.- Are there any non-AIDS comorbidities/events that should be especially monitored because of the frequency or severity of their development?
- 5.- How can the most clinically relevant non-AIDS comorbidities/events be detected early in patients with HIV infection?
- 6.- Do non-AIDS comorbidities/events that develop in HIV-infected people have the same diagnostic and therapeutic criteria as when they appear in people without HIV infection?
- 7.- Are there limitations to use the usual drugs in the treatment of comorbidities/non-AIDS events in patients with HIV infection due to characteristics of the infection itself or associated factors (antiretroviral treatment for example)?
- 8.- Are there differences in the response to treatment of comorbidities/non-AIDS events between people with and without HIV infection?

- 9.- Are there differences in the prognosis of comorbidities/non-AIDS events between people with and without HIV infection?
- 10.- What degree of involvement should physicians other than the HIV specialist have in the management of comorbidities/non-AIDS events?

## **Specific questions for Topic 5**

- 4.- What are the most important factors influencing the development of comorbidities/non-AIDS events in patients with HIV infection?
- 5.- What general measures should be recommended to prevent the development of comorbidities/non-AIDS events?
- 6.- What more specific measures should be recommended to avoid the development of comorbidities/non-AIDS events?
- 7.- Does early initiation of antiretroviral treatment influence the development of comorbidities/non-AIDS events?
- 8.- Does the composition of antiretroviral regimens influence the development of comorbidities/non-AIDS events in terms of drug families?
- 9.- Does the composition of antiretroviral regimens influence the development of comorbidities/non-AIDS events in terms of the number of drugs?
- 10.- What data exist on the efficacy of targeted measures to decrease inflammation/immunoactivation in improving the development of comorbidities/non-AIDS events?

## **Specific questions for Topic 6**

- 4.- Is it foreseeable that in the future the overall incidence of comorbidities/non-AIDS events will be higher, equal or lower than at present?
- 5.- Is it foreseeable that in the future any non-AIDS comorbidity/event will follow a different trend from the rest?
- 6.- What aspects of current management may be more decisive in having an impact on the changes in incidence that there may be/not be in the future?
- 7.- Will there be changes in the diagnostic approach in relation to the detection of comorbidities/non-AIDS events in patients with HIV infection? Will the diagnostic approach be intensified or relaxed?
- 8.- Will there be changes in the therapeutic approach to comorbidities/non-AIDS events in HIV-infected people?
- 9.- Will comorbidities/non-AIDS events condition the choice of antiretroviral treatment in the future?
- 10.- How will comorbidities/non-AIDS events influence the prognosis of HIV-infected patients in the future?