

Technology Appraisal Committee Meeting (Committee D)

Minutes: Confirmed

Date and Time: Wednesday 1 April 2015, 10:06-17:35

Venue: National Institute for Health and Care Excellence
Level 1A, City Tower
Piccadilly Plaza
Manchester
M1 4BT

Present:	1. Prof. Gary McVeigh, Chair	Present for all notes
	2. Dr Lindsay Smith, Vice Chair	Present for all notes
	3. Dr Aomesh Bhatt	Present for all notes
	4. Dr Andrew Black	Present for all notes
	5. Dr Ian Campbell	Present for notes 1 to 31
	6. Dr Ian Davidson	Present for all notes
	7. Prof. Simon Dixon	Present for all notes
	8. Mrs Susan Dutton	Present for all notes
	9. Dr Alexander Dyker	Present for all notes
	10. Mrs Gillian Ells	Present for all notes
	11. Prof. Paula Ghaneh	Present for all notes
	12. Dr Susan Griffin	Present for all notes
	13. Prof. Carol Haigh	Present for all notes
	14. Mr Malcolm Oswald	Present for all notes
	15. Dr Mohit Sharma	Present for all notes
	16. Dr Murray Smith	Present for all notes

In attendance:

Meindert Boysen	Programme Director, National Institute for Health and Care Excellence	Present for all notes
Helen Knight	Associate Director, National Institute for Health and Care Excellence	Present for all notes
Lori Farrar	Project Manager, National Institute for Health and Care Excellence	Present for notes 1 to 38
Danielle Conroy	Administrator, National Institute for Health and Care Excellence	Present for all notes
Martyn Burke	Technical Analyst, National Institute for Health and Care Excellence	Present for notes 34 to 44
Anwar Jilani	Technical Analyst, National Institute for Health and Care Excellence	Present for notes 22 to 31

Boglarka Mikudina	Technical Analyst, National Institute for Health and Care Excellence	Present for notes 1 to 18
Joanne Holden	Technical Adviser, National Institute for Health and Clinical Excellence	Present for notes 1 to 18
Nicola Hay	Technical Adviser, National Institute for Health and Clinical Excellence	Present for notes 22 to 31
Melinda Goodall	Technical Adviser, National Institute for Health and Clinical Excellence	Present for notes 34 to 44
Bram Ramaekers	Kleijnen Systematic Reviews Ltd	Present for notes 1 to 15
Robert Wolff	Kleijnen Systematic Reviews Ltd	Present for notes 1 to 15
Jeremy Jones	Southampton Health Technology Assessments Centre	Present for notes 20 to 29
Karen Pickett	Southampton Health Technology Assessments Centre	Present for notes 20 to 29
Paul Tappenden	School of Health and Related Research (ScHARR)	Present for notes 34 to 44
Praveen Thokala	School of Health and Related Research (ScHARR)	Present for notes 34 to 44
Mr Charles Gore	CEO, patient expert nominated by The Hepatitis C Trust.	Present for notes 20 to 29 and 34 to 44
Prof. Albert Ong	Professor of Renal medicine, clinical expert nominated by Otsuka Pharmaceuticals (UK) Ltd	Present for notes 1 to 15
Prof. Bruce Hendry	Professor of Renal Medicine, clinical expert nominated by Otsuka Pharmaceuticals (UK) Ltd	Present for notes 1 to 15
Dr Charles Milson	Consultant Hepatologist, clinical expert nominated by British Society of Gastroenterology.	Present for notes 20 to 29 and 34 to 44
Dr Ranjababu	Clinical expert nominated	Present for notes 20 to 29

Kulasegaram	by British HIV Association and British Association for Sexual Health and HIV.	and 34 to 44
Mrs Simone Goren	Patient expert nominated by Polycystic Kidney Disease Charity (PKD Charity).	Present for notes 1 to 15
Mrs Theresa Williams	Patient expert nominated by Polycystic Kidney Disease Charity (PKD Charity).	Present for notes 1 to 15
Malcolm Qualie	Pharmacy Lead, NHS expert nominated by NHS England.	Present for notes 20 to 29 and 34 to 44
James Palmer	NHS expert nominated by NHS England.	Present for notes 20 to 29 and 34 to 44

Non-public observers:

Jennifer Connolly	Public Health trainee, National Institute for Health and Clinical Excellence	Present for all notes
Ann Greenwood	Senior Medical Editor, National Institute for Health and Clinical Excellence	Present for all notes
Joanna Perkin	Senior Digital Editor, National Institute for Health and Clinical Excellence	Present for all notes

Notes

Welcome

1. The Chair welcomed all members of the Committee and other attendees present to the meeting. The Chair reviewed the agenda and timescales for the meeting, which included the appraisals of Tolvaptan for treating autosomal dominant polycystic kidney disease, Ombitasvir/Paritaprevir/Ritonavir with or without Dasabuvir for treating chronic hepatitis C and Ledipasvir-Sofosbuvir for treating chronic hepatitis C.
2. The Chair informed the Committee of the non-public observers at this meeting: Jennifer Connolly, Ann Greenwood and Joanna Perkin.
3. Apologies were received from Prof. David Bowen, Dr Matthew Bradley, Mrs Tracey Cole, Prof. John Henderson, Prof. John Hutton, Dr Tim Kinnaird, Dr Warren Linley and Prof. Oluwafemi Oyeboade.

Any other Business

4. None.

Notes from the last meeting

5. None.

Appraisal of Tolvaptan for treating autosomal dominant polycystic kidney disease.

Part 1 – Open session

6. The Chair welcomed the invited experts: Bram Ramaekers, Robert Wolff, Dr Albert Ong, Dr Bruce Hendry, Mrs Simone Goren and Mrs Theresa Williams to the meeting and they introduced themselves to the Committee.
7. The Chair welcomed company representatives from Otsuka to the meeting.
8. The Chair asked all Committee members to declare any relevant interests
 - 8.1. Prof. Gary McVeigh, Dr Lindsay Smith, Dr Aomesh Bhatt, Dr Andrew Black, Dr Ian Campbell, Dr Ian Davidson, Professor Simon Dixon, Mrs Susan Dutton, Dr Alexander Dyker, Mrs Gillian Ells, Prof. Paula Ghaneh, Dr Susan Griffin, Prof. Carol Haigh, Mr Malcolm Oswald, Dr Mohit Sharma and Dr Murray Smith all declared that they knew of no personal specific pecuniary interest, personal non-specific pecuniary interest, non-personal specific pecuniary interest, non-personal non-specific pecuniary interest, personal specific family interest or personal non-specific family interest for any of the technologies to be considered as part of the appraisal of Tolvaptan for treating autosomal dominant polycystic kidney disease.
9. The Chair asked all NICE Staff to declare any relevant interests.
 - 9.1. All declared that they knew of no personal specific pecuniary interest, personal non-specific pecuniary interest, non-personal specific pecuniary interest, non-personal non-specific pecuniary interest, personal specific family interest or personal non-specific family interest for any of the

technologies to be considered as part of the appraisal of Tolvaptan for treating autosomal dominant polycystic kidney disease.

10. The Chair asked all other invited guests to declare their relevant interests.
 - 10.1. All declared that they knew of no personal specific pecuniary interest, personal non-specific pecuniary interest, non-personal specific pecuniary interest, non-personal non-specific pecuniary interest, personal specific family interest or personal non-specific family interest for any of the technologies to be considered as part of the appraisal of Tolvaptan for treating autosomal dominant polycystic kidney disease.
11. The Chair introduced the lead team, Dr Alexander Dyker, Mrs Gillian Ells and Mr Malcolm Oswald who gave presentations on the clinical effectiveness and cost effectiveness of Tolvaptan for treating autosomal dominant polycystic kidney disease.
12. The Committee then discussed the clinical effectiveness, patient perspective and cost effectiveness of Tolvaptan for treating autosomal dominant polycystic kidney disease on the basis of the evidence before them, and potential equality issues raised in this appraisal. They sought clarification and advice from the experts present. The discussions included:
 - 12.1. The nature of the disease and how autosomal dominant polycystic kidney disease (ADPKD) affects the quality of life of patients.
 - 12.2. The effect of tolvaptan treatment on the quality of life of patients including both the benefits and the adverse effects.
 - 12.3. The current clinical practice for the management of ADPKD.
 - 12.4. The marketing authorisation of tolvaptan and how rapidly progressing disease can be defined.
 - 12.5. The clinical effectiveness evidence including:
 - 12.5.1. The design of the clinical trial and the generalisability of the results.
 - 12.5.2. The outcomes of the clinical trial and the methodology used to measure them.
 - 12.5.3. The treatment effect of tolvaptan compared to placebo.
 - 12.5.4. The adverse effects and safety concerns with tolvaptan treatment; and the proposed management programme.
 - 12.6. The cost effectiveness evidence including:
 - 12.6.1. The economic model and the methods used to model disease progression and treatment effect.
 - 12.6.2. The primary outcome of the model and its measurement.

- 12.6.3. The usage of a surrogate measure for modelling the primary outcome.
 - 12.6.4. The treatment discontinuation rate, the health state utility values, whether a utility decrement should be applied for tolvaptan treatment in the economic model.
 - 12.6.5. The scenarios of the exploratory and additional analyses of the ERG.
 - 12.6.6. The most plausible ICER.
- 13. The Chair asked the company representatives whether they wished to comment on any matters of factual accuracy.
 - 14. The Chair explained that “representatives of the press and other members of the public be excluded from the remainder of this meeting having regard to the confidential nature of the business to be transacted, publicity on which would be prejudicial to the public interest” (Section 1(2) Public Bodies (Admission to Meetings) Act 1960)” and all public attendees left the meeting.
 - 15. The Chair then thanked the experts, company representatives and academic group for their attendance, participation and contribution to the appraisal and they left the meeting.

Part 2 – Closed session

- 16. Discussion on confidential information continued. This information was supplied by the company.
- 17. The Committee continued to discuss the clinical and cost effectiveness of Tolvaptan for treating autosomal dominant polycystic kidney disease.
- 18. The Committee instructed the technical team to prepare the Appraisal Consultation Document (ACD) in line with their decisions.

Appraisal of Ombitasvir/Paritaprevir/Ritonavir with or without Dasabuvir for treating chronic Hepatitis C.

Part 1 – Open session

- 19. The Vice Chair, welcomed the invited experts: Jeremy Jones, Karen Pickett, Mr Charles Gore, Malcolm Qualie, James Palmer, Dr Charles Millson and Dr Ranjababu Kulasegaram to the meeting and they introduced themselves to the Committee.
- 20. The Vice Chair welcomed company representatives from AbbVie to the meeting.
- 21. The Vice Chair asked all Committee members to declare any relevant interests
 - 21.1 Prof. Gary McVeigh, Dr Lindsay Smith, Dr Aomesh Bhatt, Dr Andrew Black, Dr Ian Campbell, Dr Ian Davidson, Mrs Susan Dutton, Dr Alexander Dyker, Mrs

Gillian Ells, Prof. Paula Ghaneh, Prof. Carol Haigh, Mr Malcolm Oswald, Dr Mohit Sharma and Dr Murray Smith all declared that they knew of no personal specific pecuniary interest, personal non-specific pecuniary interest, non-personal specific pecuniary interest, non-personal non-specific pecuniary interest, personal specific family interest or personal non-specific family interest for any of the technologies to be considered as part of the appraisal of Ombitasvir/Paritaprevir/Ritonavir with or without dasabuvir for treating chronic hepatitis C.

21.2 Dr Susan Griffin declared a non-personal non-specific pecuniary interest. The Centre for Health Economics (at the University of York) receives funding from the Department of Health through the Policy Research Programme. She is involved in a scoping project, commissioned through the Policy Research Programme on behalf of NHS England, to look at treatment of Hepatitis C in the UK. The University of York is paid for this work but Dr Griffin does not receive payment personally.

22.2.1 It was agreed that this declaration would not prevent Dr Susan Griffin from participating in this section of the meeting.

21.3 Professor Simon Dixon declared a non-personal non-specific pecuniary interest in relation to BMS who manufacture daclatasvir, which is the subject of an ongoing appraisal. He is the Director of a Health Economics Unit that has undertaken research for BMS. The work was methodological and not related to any particular disease or drug. The University of Sheffield was paid for the work but Professor Dixon did not receive payment personally.. This company is not listed as a comparator for this topic.

21.3.1 It was agreed that this declaration would not prevent Professor Simon Dixon from participating in this section of the meeting.

22. The Vice Chair asked all NICE Staff to declare any relevant interests.

22.1. All declared that they knew of no personal specific pecuniary interest, personal non-specific pecuniary interest, non-personal specific pecuniary interest, non-personal non-specific pecuniary interest, personal specific family interest or personal non-specific family interest for any of the technologies to be considered as part of the appraisal of Ombitasvir/Paritaprevir/Ritonavir with or without dasabuvir for treating chronic hepatitis C.

23. The Vice Chair asked all other invited guests (assessment group/ERG and invited experts, not including observers) to declare their relevant interests.

23.1. All declared that they knew of no personal specific pecuniary interest, personal non-specific pecuniary interest, non-personal specific pecuniary interest, non-personal non-specific pecuniary interest, personal specific family interest or personal non-specific family interest for any of the technologies to be considered as part of the appraisal of Ombitasvir/Paritaprevir/Ritonavir with or without dasabuvir for treating chronic hepatitis C.

- 23.2. Mr Charles Gore declared a non-personal specific pecuniary interest as The Hepatitis C Trust receives some funding from the company for this appraisal.
 - 23.2.1. It was agreed that this declaration would not prevent Mr Charles Gore from participating in this section of the meeting.
- 23.3. Dr Charles Millson declared a non-personal specific pecuniary interest as he acts as a delegate and speaker at Hepatitis C educational events sponsored by the company for this appraisal.
 - 23.3.1. It was agreed that this declaration would not prevent Dr Charles Millson from participating in this section of the meeting.
- 23.4. Dr Ranjababu Kulasegaram declared a non-specific non-pecuniary interest as he has participated in other NICE discussions regarding HIV/HCV and clinical trials.
 - 23.4.1. It was agreed that this declaration would not prevent Dr Kulasegaram from participating in this section of the meeting.
- 24. The Vice Chair introduced the lead team, Dr Mohit Sharma, Dr Aomesh Bhatt and Mr Malcolm Oswald who gave presentations on the clinical effectiveness and cost effectiveness of Ombitasvir/paritaprevir/ritonavir with or without dasabuvir for treating chronic hepatitis C.
- 25. The Committee then discussed the clinical effectiveness, patient perspective and cost effectiveness of Ombitasvir/paritaprevir/ritonavir with or without dasabuvir for treating chronic hepatitis C on the basis of the evidence before them, and potential equality issues raised in this appraisal. They sought clarification and advice from the experts present. The discussions included:
 - 25.1. Disease background and treatment pathway for chronic hepatitis C including limitations of available treatments.
 - 25.2. Marketing authorisation of co-formulated ombitasvir-paritaprevir-ritonavir with or without dasabuvir, and treatment regimen specified in the summary of product characteristics.
 - 25.3. Final scope issued by NICE and the decision problem addressed in the company's submission.
 - 25.4. Strengths and weaknesses of clinical evidence-base including results of clinical trials and the company's approach to evidence synthesis.
 - 25.5. The company's economic model, base case results, sensitivity and scenario analyses.
 - 25.6. The Evidence Review Group's critique of the clinical and cost-effectiveness data presented in the company's submission.
 - 25.7. The exploratory analyses conducted by the Evidence Review Group.

26. The Vice Chair asked the company representatives whether they wished to comment on any matters of factual accuracy.
27. The Vice Chair explained that “representatives of the press and other members of the public be excluded from the remainder of this meeting having regard to the confidential nature of the business to be transacted, publicity on which would be prejudicial to the public interest” (Section 1(2) Public Bodies (Admission to Meetings) Act 1960)” and all public attendees left the meeting.
28. The Vice Chair then thanked the experts, company representatives and academic group for their attendance, participation and contribution to the appraisal and they left the meeting.

Part 2 – Closed session

29. Discussion on confidential information continued. This information was supplied by the company.
30. The Committee continued to discuss the clinical and cost effectiveness of Ombitasvir/paritaprevir/ritonavir with or without dasabuvir for treating chronic hepatitis C.
31. The Committee agreed to defer a decision on the content of the guidance section of the Appraisal Consultation Document (ACD) until 6 May 2015.

Appraisal of Ledipasvir-Sofosbuvir for treating chronic hepatitis C.

Part 1 – Open session

32. The Chair welcomed the invited experts: Paul Tappenden, Praveen Thokala, Charles Gore, Mr Malcolm Qualie, James Palmer, Dr Charles Millson and Dr Ranjababu Kulasegaram to the meeting and they introduced themselves to the Committee.
33. The Chair welcomed company representatives from Gilead to the meeting.
34. The Chair asked all Committee members to declare any relevant interests
 - 34.1. Prof. Gary McVeigh, Dr Lindsay Smith, Dr Aomesh Bhatt, Dr Andrew Black, Dr Ian Campbell, Dr Ian Davidson, Mrs Susan Dutton, Dr Alexander Dyker, Mrs Gillian Ells, Prof. Paula Ghaneh, Prof. Carol Haigh, Mr Malcolm Oswald, Dr Mohit Sharma and Dr Murray Smith all declared that they knew of no personal specific pecuniary interest, personal non-specific pecuniary interest, non-personal specific pecuniary interest, non-personal non-specific pecuniary interest, personal specific family interest or personal non-specific family interest for any of the technologies to be considered as part of the appraisal of Ledipasvir-Sofosbuvir for treating chronic hepatitis C.
 - 34.2. Dr Susan Griffin declared a non-personal non-specific pecuniary interest. The Centre for Health Economics (at the University of York) receives funding from the Department of Health through the Policy Research Programme. She is involved in a scoping project, commissioned through the Policy Research Programme on behalf of NHS England, to look at

treatment of Hepatitis C in the UK. The University of York is paid for this work but Dr Griffin does not receive payment personally.

34.2.1. It was agreed that this declaration would not prevent Dr Susan Griffin from participating in this section of the meeting.

34.3. Professor Simon Dixon declared a non-personal non-specific pecuniary interest in relation to BMS who manufacture daclatasvir, which is the subject of an ongoing appraisal. He is the Director of a Health Economics Unit that has undertaken research for BMS. The work was methodological and not related to any particular disease or drug. The University of Sheffield was paid for the work but Professor Dixon did not receive payment personally. This company is not listed as a comparator for this topic.

34.3.1. It was agreed that this declaration would not prevent Professor Simon Dixon from participating in this section of the meeting.

35. The Chair asked all NICE Staff to declare any relevant interests.

35.1. All declared that they knew of no personal specific pecuniary interest, personal non-specific pecuniary interest, non-personal specific pecuniary interest, non-personal non-specific pecuniary interest, personal specific family interest or personal non-specific family interest for any of the technologies to be considered as part of the appraisal of Ledipasvir-Sofosbuvir for treating chronic hepatitis C.

36. The Chair asked all other invited guests (assessment group/ERG and invited experts, not including observers) to declare their relevant interests.

36.1. All declared that they knew of no personal specific pecuniary interest, personal non-specific pecuniary interest, non-personal specific pecuniary interest, non-personal non-specific pecuniary interest, personal specific family interest or personal non-specific family interest for any of the technologies to be considered as part of the appraisal of Ledipasvir-Sofosbuvir for treating chronic hepatitis C.

36.2. Mr Charles Gore declared a non-personal specific pecuniary interest as The Hepatitis C Trust receives some funding from the company for this appraisal.

36.2.1. It was agreed that this declaration would not prevent Mr Charles Gore from participating in this section of the meeting

36.3. Dr Charles Millson declared a non-personal specific pecuniary interest as he acts as a delegate and speaker at Hepatitis C educational events sponsored by the company for this appraisal.

36.3.1. It was agreed that this declaration would not prevent Dr Charles Millson from participating in this section of the meeting.

- 36.4. Dr Ranjababu Kulasegaram declared a personal non-specific pecuniary interest as he was on the advisory board for Sofosbuvir and participated in PHOTON 2.
- 36.4.1. It was agreed that this declaration would not prevent Dr Kulasegaram from participating in this section of the meeting.
37. The Chair introduced the key themes arising from the consultation responses to the Appraisal Consultation Document (ACD) received from consultees, commentators and through the NICE website.
38. The Committee proceeded to discuss the clinical effectiveness and cost effectiveness of Ledipasvir-Sofosbuvir for treating chronic hepatitis C on the basis of the evidence before them. The discussions included:
- 38.1. A summary of the clinical and cost effectiveness evidence presented at the first Appraisal Committee meeting.
- 38.2. A summary of the Committee's considerations leading to the preliminary recommendations in the ACD.
- 38.3. The comments/responses provided during consultation by consultees, commentators and via the web site.
- 38.4. The additional analyses provided by the company in response to ACD (not requested by the Committee).
- 38.5. Key issues including 12 weeks' treatment for people with treatment-experienced genotype 1 or 4 HCV with cirrhosis, a subgroup of people with genotype 3 HCV unsuitable for interferon therapy and the implementation of NICE's preliminary recommendations.
39. The Chair asked the company representatives whether they wished to comment on any matters of factual accuracy.
40. The Chair explained that "representatives of the press and other members of the public be excluded from the remainder of this meeting having regard to the confidential nature of the business to be transacted, publicity on which would be prejudicial to the public interest" (Section 1(2) Public Bodies (Admission to Meetings) Act 1960)" and all public attendees left the meeting.
41. The Chair then thanked the experts, company representatives and academic group for their attendance, participation and contribution to the appraisal and they left the meeting.

Part 2 – Closed session

42. Discussion on confidential information continued. This information was supplied by the company.
43. The Committee continued to discuss the clinical and cost effectiveness of Ledipasvir-Sofosbuvir for treating chronic hepatitis C.

44. The Committee agreed to defer a decision on the content of the guidance section of the Appraisal Consultation Document (ACD) until further analyses had been undertaken by the company.

Date, time and venue of the next meeting

45. Wednesday 6 May 2015, at National Institute for Health and Care Excellence, Level 1A, City Tower, Piccadilly Plaza, Manchester M1 4BT.