

## Technology Appraisal Committee Meeting (Committee C)

**Minutes:** Confirmed

**Date and Time:** Wednesday 12 April 2017, 10:00 - 16:00.

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

<b>Present:</b>	1. Chair Professor Andrew Stevens	Present for all notes
	2. Mr Michael Chambers	Present for all notes
	3. Mr David Chandler	Present for all notes
	4. Gail Coster	Present for all notes
	5. Dr Prithwiraj Das	Present for notes 29 - 52
	6. Mr John P Hampson	Present for all notes
	7. Dr Nigel Langford	Present for all notes
	8. Dr Iain Miller	Present for all notes
	9. Professor Eugene Milne	Present for all notes
	10. Professor Stephen O'Brien	Present for all notes
	11. Sarah Parry	Present for all notes
	12. Pamela Rees	Present for all notes
	13. Professor Peter Selby	Present for all notes
	14. Professor Matt Stevenson	Present for notes 17 – 64
	15. Dr Paul Tappenden	Present for all notes
	16. Nigel Westwood	Present for all notes
	17. Dr Judith Wardle	Present for all notes

### In attendance:

Meindert Boysen	Programme Director, National Institute for Health and Care Excellence	Present for all notes
Frances Sutcliffe	Associate Director, National Institute for Health and Care Excellence	Present for all notes
Kate Moore	Project Manager, National Institute for Health and Care Excellence	Present for all notes
Mandy Tonkinson	Administrator, National Institute for Health and Care Excellence	Present for notes 1 – 40

Emily Richards	Assistant Project Manager, National Institute for Health and Care Excellence	Present for notes 41 - 64
Hamish Lunagaria	Technical Analyst, National Institute for Health and Care Excellence	Present for notes 1 to 16
Martyn Burke	Technical Adviser, National Institute for Health and Care Excellence	Present for notes 1 to 16
Ian Watson	Technical Adviser, National Institute for Health and Care Excellence	Present for notes 1 to 16
Abitha Senthinathan	Technical Analyst, National Institute for Health and Care Excellence	Present for notes 17 – 28
Alexandra Filby	Technical Adviser, National Institute for Health and Care Excellence	Present for notes 17 – 28
Anna Brett	Technical Analyst, National Institute for Health and Care Excellence	Present for notes 29 – 40
Nicola Hay	Technical Analyst, National Institute for Health and Care Excellence	Present for notes 29 – 40
Henry Edwards	Technical Analyst, National Institute for Health and Care Excellence	Present for notes 41 - 64

**Non-public attendees:**

Charlotta Karna	ERG representative	Present for notes 5 – 13
Peter Cain	ERG representative	Present for notes 5 – 13
Hazel Squires	ERG representative	Present for notes 17 – 25
Inigo Bermejo	ERG representative	Present for notes 17 – 25
Jo Picot	ERG representative	Present for notes 29 – 37
Micah Rose	ERG representative	Present for notes 29 – 37
Angela Stainthorpe	ERG representative	Present for notes 41 – 49 and 53 – 61
Adrian Bagust	ERG representative	Present for notes 41 – 49 and 53 – 61
Sanjay Popat	Clinical Expert	Present for notes 41 – 49 and 53 – 61
Peter Clark	Commissioning Expert	Present for notes 5 – 13, 41 – 49 and 53 – 61
Dominic Bradshaw	NICE observer	Present for all notes
Steve Estevao	NICE observer	Present for all notes
Karyo Angeloudis	NICE observer	Present for all notes
Leslie Hays	NICE observer	Present for all notes
Christopher Eatough	NICE observer	Present for all notes
Lee Walker	NICE observer	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 carfilzomib for treated multiple myeloma, adalimumab and dexamethasone for treating non-infectious uveitis, nivolumab for relapsed or refractory classical Hodgkin lymphoma, nivolumab for treating metastatic, squamous, non-small-cell lung cancer after chemotherapy and nivolumab for previously treated locally advanced or metastatic non-squamous non-small-cell lung cancer.
2. The Chair informed the Committee of the non-public observers at this meeting: Dominic Bradshaw, Steve Estevao, Karyo Angeloudis, Leslie Hays, Christopher Eatough and Lee Walker.
3. Apologies were received from Professor Kathryn Abel, Kamal Balakrishnan, Professor Andrea Manca, Professor Andrew Renehan, and Robert Walton.

### Any other Business

4. None

## Appraisal of Carfilzomib for treated multiple myeloma [ID934] Part 1 – Open session

5. The Chair welcomed the invited experts: Peter Cain, Peter Clark and Charlotta Karna to the meeting and they introduced themselves to the Committee.
6. The Chair welcomed company representatives from Amgen to the meeting.
7. The Chair asked all Committee members to declare any relevant interests
  - 7.1. Mr Michael Chambers, Mr David Chandler, Gail Coster, Mr John P Hampson, Dr Nigel Langford, Dr Iain Miller, Professor Eugene Milne, Professor Stephen O'Brien, Sarah Parry, Pamela Rees, Dr Peter Selby, Dr Paul Tappenden, Nigel Westwood and Dr Judith Wardle all declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 carfilzomib for treated multiple myeloma.
  - 7.2. Professor Stephen O'Brien declared a non-personal non-specific financial interest as his University and/or NHS Trust has received research funding for clinical trial work from the following companies: Pfizer, Novartis and Bristol-Myers Squibb
    - 9.2.1 It was agreed that this declaration would not prevent Professor Stephen O'Brien from participating in this section of the meeting.
  - 7.3. Professor Matt Stevenson is conflicted as he declared a personal specific financial interest. He has received payment from by Onyx who previously held the rights to carfilzomib to comment on their STA submission. Onyx were then taken over by Amgen and he has done no further work.
8. The Chair asked all NICE Staff to declare any relevant interests.
  - 8.1. All declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 carfilzomib for treated multiple myeloma.
9. The Chair asked all other invited guests (ERG and invited experts, not including observers) to declare their relevant interests.
  - 9.1. All declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 carfilzomib for treated multiple myeloma.
10. 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.

11. The Chair asked the company representatives whether they wished to comment on any matters of factual accuracy.
12. 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.
13. The Chair then thanked the experts and company representatives for their attendance, participation and contribution to the appraisal and they left the meeting.

## **Part 2 – Closed session**

14. Discussion on confidential information continued. This information was supplied by the company.
15. The Committee continued to discuss the clinical and cost effectiveness of carfilzomib for treated multiple myeloma.
  - 15.1. The committee decision was based on consensus.
16. The Committee instructed the technical team to prepare the Final Appraisal Determination (FAD) in line with their decisions.

## **Appraisal of adalimumab and dexamethasone for treating non-infectious uveitis [ID763]**

### **Part 1 – Open session**

17. The Chair welcomed the invited experts: Inigo Bermejo and Hazel Squires to the meeting and they introduced themselves to the Committee.
18. The Chair welcomed company representatives from AbbVie and Allergan to the meeting.
19. The Chair asked all Committee members to declare any relevant interests
  - 19.1. Mr Michael Chambers, Mr David Chandler, Gail Coster, Mr John P Hampson, Dr Nigel Langford, Dr Iain Miller, Professor Eugene Milne, Professor Stephen O'Brien, Sarah Parry, Pamela Rees, Dr Peter Selby, Professor Matt Stevenson, Nigel Westwood and Dr Judith Wardle all declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 adalimumab and dexamethasone for treating non-infectious uveitis.
  - 19.2. Dr Paul Tappenden declared a non-personal specific financial interest as he provided an internal peer review of the Assessment Group report, although he had not been directly involved.
    - 19.2.1. It was agreed that this declaration would not prevent Dr Paul Tappenden from participating in this section of the meeting.

- 19.3 Dr Prithwiraj Das is conflicted as he declared that his organisation (Boehringer Ingelheim) has a biosimilar to adalimumab in the pipeline.
20. The Chair asked all NICE Staff to declare any relevant interests.
- 20.1. All declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 adalimumab and dexamethasone for treating non-infectious uveitis.
21. The Chair asked all other invited guests (assessment group and invited experts, not including observers) to declare their relevant interests.
- 21.1. All declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 adalimumab and dexamethasone for treating non-infectious uveitis.
22. 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.
23. The Chair asked the company representatives whether they wished to comment on any matters of factual accuracy.
24. 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.
25. The Chair then thanked the experts and company representatives for their attendance, participation and contribution to the appraisal and they left the meeting.

## **Part 2 – Closed session**

26. Discussion on confidential information continued. This information was supplied by the company.
27. The Committee continued to discuss the clinical and cost effectiveness of adalimumab and dexamethasone for treating non-infectious uveitis.
- 27.1. The committee decision was based on consensus.
28. The Committee instructed the technical team to prepare the Final Appraisal Determination (FAD) in line with their decisions.

## **Appraisal of nivolumab for relapsed or refractory classical Hodgkin lymphoma [ID972]**

## Part 1 – Open session

29. The Chair welcomed the invited experts: Peter Clark, Jo Picot and Micah Rose to the meeting and they introduced themselves to the Committee.
30. The Chair welcomed company representatives from Bristol-Myers Squibb Pharmaceuticals to the meeting.
31. The Chair asked all Committee members to declare any relevant interests
  - 31.1. Mr David Chandler, Gail Coster, Dr Prithwiraj Das, Mr John P Hampson, Dr Nigel Langford, Dr Iain Miller, Professor Eugene Milne, Professor Sarah Parry, Pamela Rees, Dr Peter Selby, Professor Matt Stevenson, Dr Paul Tappenden, Nigel Westwood and Dr Judith Wardle all declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 nivolumab for relapsed or refractory classical Hodgkin lymphoma.
  - 31.2. Mr Michael Chambers declared a personal specific financial interest as he is involved currently funded by Takeda Pharmaceuticals (possible comparator company) as part of their contribution to the IMI GetReal project. The funding (now scheduled to end in Jun 2017) enables Mr Chambers to undertake general project activities, which have not been specific to any of Takeda's medicines.
    - 31.2.1. It was agreed that this declaration would not prevent Mr Michael Chambers from participating in this section of the meeting.
  - 31.3. Professor Stephen O'Brien declared a non-personal non-specific financial interest as his organisation has received research funding from Bristol-Myers Squibb for clinical trials in CML.
    - 31.3.1. It was agreed that this declaration would not prevent Professor Stephen O'Brien from participating in this section of the meeting.
32. The Chair asked all NICE Staff to declare any relevant interests.
  - 32.1. All declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 nivolumab for relapsed or refractory classical Hodgkin lymphoma.
33. The Chair asked all other invited guests (ERG and invited experts, not including observers) to declare their relevant interests.
  - 33.1. All declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 nivolumab for relapsed or refractory classical Hodgkin lymphoma.

34. 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.
35. The Chair asked the company representatives whether they wished to comment on any matters of factual accuracy.
36. 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.
37. The Chair then thanked the experts and company representatives for their attendance, participation and contribution to the appraisal and they left the meeting.

## **Part 2 – Closed session**

38. Discussion on confidential information continued. This information was supplied by the company.
39. The Committee continued to discuss the clinical and cost effectiveness of nivolumab for relapsed or refractory classical Hodgkin lymphoma.
  - 39.1. The committee decision was based on consensus.
40. The Committee instructed the technical team to prepare the Final Appraisal Determination (FAD) in line with their decisions.

## **Appraisal of nivolumab for treating metastatic, squamous, non-small-cell lung cancer after chemotherapy [ID811]**

### **Part 1 – Open session**

41. The Chair welcomed the invited experts: Angela Stainthorpe, Adrian Bagust, Sanjay Popat and Peter Clark to the meeting and they introduced themselves to the Committee.
42. The Chair welcomed company representatives from Bristol-Myers Squibb Pharmaceuticals to the meeting.
43. The Chair asked all Committee members to declare any relevant interests
  - 43.1. Mr Michael Chambers, Mr David Chandler, Gail Coster, Dr Prithwiraj Das Mr John P Hampson, Dr Nigel Langford, Dr Iain Miller, Professor Eugene Milne, Sarah Parry, Pamela Rees, Dr Peter Selby, Professor Matt Stevenson, , Nigel Westwood, Dr Judith Wardle all declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 nivolumab for treating metastatic, squamous, non-small-cell lung cancer after chemotherapy



- 43.2. Professor Stephen O'Brien declared a non-personal non-specific financial interest as his University and/or NHS Trust has received research funding for clinical trial work from the following companies: Pfizer, Novartis and Bristol-Myers Squibb
- 9.2.1 It was agreed that this declaration would not prevent Professor Stephen O'Brien from participating in this section of the meeting.
- 43.3. Dr Paul Tappenden declared a non-personal specific financial interest as he provided an internal peer review of the DSU report, although he had not been directly involved.
- 43.3.1. It was agreed that this declaration would prevent Dr Paul Tappenden from participating in this section of the meeting.
- 43.4. Dr Prithwiraj Das was absent due conflicts - a personal specific financial interest. He is employed by Boehringer Ingelheim Limited. Boehringer Ingelheim is listed as a comparator manufacturer for this appraisal.
44. The Chair asked all NICE Staff to declare any relevant interests.
- 44.1. All declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 nivolumab for treating metastatic, squamous, non-small-cell lung cancer after chemotherapy.
45. The Chair asked all other invited guests (ERG and invited experts, not including observers) to declare their relevant interests.
- 45.1. All declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 nivolumab for treating metastatic, squamous, non-small-cell lung cancer after chemotherapy.
46. 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.
47. The Chair asked the company representatives whether they wished to comment on any matters of factual accuracy.
48. 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.

49. The Chair then thanked the experts and company representatives for their attendance, participation and contribution to the appraisal and they left the meeting.

## **Part 2 – Closed session**

50. Discussion on confidential information continued. This information was supplied by the company.
51. The Committee continued to discuss the clinical and cost effectiveness of nivolumab for treating metastatic, squamous, non-small-cell lung cancer after chemotherapy
- 51.1. The committee decision was based on consensus.
52. The Committee instructed the technical team to prepare the Final Appraisal Determination (FAD) in line with their decisions.

## **Appraisal of nivolumab for previously treated locally advanced or metastatic non-squamous non-small-cell lung cancer [ID900]**

## **Part 1 – Open session**

53. The Chair welcomed the invited experts: Angela Stainthorpe, Adrian Bagust, Sanjay Popat and Peter Clark the meeting and they introduced themselves to the Committee.
54. The Chair welcomed company representatives from Bristol-Myers Squibb Pharmaceuticals to the meeting.
55. The Chair asked all Committee members to declare any relevant interests
- 55.1. Mr Michael Chambers, Mr David Chandler, Gail Coster, Mr John P Hampson, Dr Nigel Langford, Dr Iain Miller, Professor Eugene Milne, Sarah Parry, Pamela Rees, Dr Peter Selby, Professor Matt Stevenson, , Nigel Westwood, Dr Judith Wardle all declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 nivolumab for previously treated locally advanced or metastatic non-squamous non-small-cell lung cancer.
- 55.2. Professor Stephen O'Brien declared a non-personal non-specific financial interest as his University and/or NHS Trust has received research funding for clinical trial work from the following companies: Pfizer, Novartis and Bristol-Myers Squibb
- 9.2.1 It was agreed that this declaration would not prevent Professor Stephen O'Brien from participating in this section of the meeting.
- 55.3. Dr Paul Tappenden declared a non-personal specific financial interest as he provided an internal peer review of the DSU report, although he had not been directly involved.

- 55.3.1. It was agreed that this declaration would prevent Dr Paul Tappenden from participating in this section of the meeting.
- 55.4. Dr Prithwiraj Das was absent due conflicts - a personal specific financial interest. He is employed by Boehringer Ingelheim Limited. Boehringer Ingelheim is listed as a comparator manufacturer for this appraisal.
56. The Chair asked all NICE Staff to declare any relevant interests.
- 56.1. All declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 nivolumab for previously treated locally advanced or metastatic non-squamous non-small-cell lung cancer
57. The Chair asked all other invited guests (ERG and invited experts, not including observers) to declare their relevant interests.
- 57.1. All declared that they knew of no personal specific financial interest, personal non-specific financial interest, non-personal specific financial interest, non-personal non-specific financial 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 nivolumab for previously treated locally advanced or metastatic non-squamous non-small-cell lung cancer.
58. 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.
59. The Chair asked the company representatives whether they wished to comment on any matters of factual accuracy.
60. 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.
61. The Chair then thanked the experts and company representatives for their attendance, participation and contribution to the appraisal and they left the meeting.

## **Part 2 – Closed session**

62. Discussion on confidential information continued. This information was supplied by the company.
63. The Committee continued to discuss the clinical and cost effectiveness of nivolumab for previously treated locally advanced or metastatic non-squamous non-small-cell lung cancer.
- 63.1. The committee decision was based on consensus.

64. The Committee instructed the technical team to prepare the Final Appraisal Determination (FAD) in line with their decisions.

**Date, time and venue of the next meeting**

65. Tuesday 16 May 2017 at National Institute for Health and Care Excellence, Level 1A, City Tower, Piccadilly Plaza, Manchester M1 4BT.