

# **Fecal microbiota transplantation**

**Draft evidence report: Peer review** 

September 30, 2016

# **Health Technology Assessment Program (HTA)**

Washington State Health Care Authority PO Box 42712 Olympia, WA 98504-2712 (360) 725-5126

# **RESPONSES TO PEER REVIEWS AND PUBLIC COMMENTS**

Spectrum Research is an independent vendor contracted to produce evidence assessment reports for the Washington HTA program. For transparency, all comments received during the public comment periods are included in this response document. Comments related to program decisions, process, or other matters not pertaining to the evidence report are acknowledged through inclusion only.

This document responds to clinical and peer reviews from the following parties:

- 1. Christina Surawicz, MD (peer reviewer)
- 2. Paul Pottinger, MD (peer reviewer)

No other comments were received.

Specific responses pertaining to each comment are included in Table 1.

Page of draft report (section)	Comment	Response
	MD (peer reviewer)	
Introduction	Overview of topic is adequate? Yes	Thank you for your comments.
	Topic of assessment is important to address? Yes	
	Public policy and clinical relevance are well defined? Yes	
Background	Content of literature review/background is sufficient? The background and literature on rx of CDI and IBD was very flawed. I have edited and updated and will attach separate Word documents.  Also p 44, collagenous and lym colitis are not types of IBD, this should be deleted. Also can add second peak of IBD in older individuals	Thank you for your suggestions; we have looked them over and made a number of changes to the background section.
	P 41 definition of recurrence is wrong, do not need to have 6-8 wk taper, that is outdated. Also note that recurrent and refractory are different, I have clarified that in the word document.	
Report objectives	Aims/objectives clearly address relevant policy and	
& key questions	clinical issue? Yes	
	Key questions clearly defined and adequate for	
Methods	achieving aims? Yes  Method for identifying relevant studies is adequate?	Thank you for your comments
Methous	Yes	Thank you for your comments.
	Criteria for the inclusion and exclusion of studies is	
	appropriate? Yes	
	Method for Level of Evidence (LoE) rating is	
	appropriate and clearly explained? Yes	
	Data abstraction and analysis/review are adequate? Yes	
Results	Amount of detail presented in the results section appropriate? Yes	Thank you for your comments.
	Key questions are answered? One thing that can be confusing is the difference between recurrent and refractory, for instance the Cammarota study clearly had much more sick pts in it, with the pseudomembranes, so sick that the first 2 died which is why they changed the protocol. But for purposes of this review, it does make sense to combine those 2 RCTs.	
	Note new RCT from Kelly in Annals Intern Med August 2016 also positive.	The search was repeated on September 2, 2016 to identify new RCTs published since the original search date; the RCT by Kelly et al. (2016) was identified and has been included in the final report.
I	If you want to add focus on severe/refractory the	Thank you for your comments.

Page of draft	Comment	Response
report (section)	r, MD (peer reviewer)	
CIII ISTIII a Salawicz	series of Monika Fischer should be included. The	
	indications for FMT in this group are unclear so prob	
	better to exclude.	
	Also the evidence that FMT causes is flares of IBD is	
	good so I would state this more strongly	
	Figures, tables and appendices clear and easy to read? Yes	
	Implications of the major findings clearly stated? Not really stated	
	Have gaps in the literature been dealt with adequately? Yes	
	Recommendations address limitations of literature? Yes	
Conclusions	Are the conclusions reached valid? Yes with the 2 following suggestions	Thank you for your comments.
	KQ1: Your text: Moreover, FMT procedure(s) for treatment of recurrent CDI (after the initial allocated treatment) were performed in significantly fewer patients in the FMT group than in the vancomycin group	Thank you for your comment; the text has been edited for clarity.
	My comment: This is confusing. What you mean to say is that since there were more people with recurrences in the vanco group, more of them had to have a "rescue" or repeat FMT.	
	KQ3:  Your text: quality of evidence was insufficient to draw no firm conclusions can be drawn.	Thank you for your comment; the text has been corrected.
	My comment: My comment: the quality of evidence was insufficient to draw a firm conclusion. Is this what you mean to say?	
Overall presentation and relevancy	Is the review well-structured and organized? Yes	Thank you for your comments.
•	Are the main points clearly presented? Yes	
	Is it relevant to clinical medicine? Definitely yes	Thank you. Yes, the overall quality evidence rating of low results from a combination of
	What is surprising is that the treatment that is so	flaws in methodological design of the trials
	effective clinically , ie FMT for RCDI, has low quality	together with small sample sizes.
	evidence and that the treatment that should be only	

Page of draft	Comment	Response
report (section)		
Christina Surawicz	, MD (peer reviewer)	
	done in RCTs in my opinion has moderate quality of evidence. I assume this is because of flaws in the RCTs of the former. Clinically, this therapy for RCDI is so effective, and there is nothing else as good since the only other option for pts with multiple recurrences is to stay on vanco for the rest of their lives. I am not sure that this is clear in the report. FMT is the most successful therapy for RCDI, I started doing it in 2004, and would not have continued if not for the efficacy and for lack of other options.	
	Is it important for public policy or public health? I am not sure that it is.  Also note in the references, that reference #37 in the first set of references is incorrect and that ref.#35 in the second set is wrong, they are orthopedic papers.	Thank you, these references have been removed.
Quality of the report	Quality Of the Report  Superior X X  Good   Fair   Poor	Thank you.

Page of draft report (section)	Comment	Response
Paul Pottinger, MD	(peer reviewer)	
Introduction	Overview of topic is adequate? Yes	Thank you for your comments.
	Topic of assessment is important to address? Yes	
	Public policy and clinical relevance are well defined?	
	Yes	
	This topic is clearly one of great importance to the	
	health of Washingtonians (indeed, patients and their	
	families nationwide), and this is made clear in the	
	introduction.	
Background	Content of literature review/background is sufficient?	Thank you for your comments.
background	Yes.	mank you for your comments.
	The background information is clear and easy to	
	understand.	
Report objectives	Aims/objectives clearly address relevant policy and	

Page of draft report (section)	Comment	Response
Paul Pottinger, ML	) (peer reviewer)	
& key questions	clinical issue? Absolutely yes  Key questions clearly defined and adequate for achieving aims? Yes, very clearly.  I am very impressed with the scope and technique employed here.	
Methods	Method for identifying relevant studies is adequate? Yes, totally.	Thank you for your comment.
	Criteria for the inclusion and exclusion of studies is appropriate? Yes (with note that a relevant study has been published since the time of this review, by Kelly et al, Ann Int Med 2016. If possible, that study should be included in the final draft).	The search was repeated on September 2, 2016 to identify new RCTs published since the original search date; the RCT by Kelly et al. (2016) was identified and has been included in the final report.
	Method for Level of Evidence (LoE) rating is appropriate and clearly explained? Yes.	Thank you for your comments.
	Data abstraction and analysis/review are adequate? Yes, very clear and exhaustive.	
Results	Amount of detail presented in the results section appropriate? Yes, more than I would have expected.	Thank you for your comments.
	Key questions are answered? Yes.	
	Figures, tables and appendices clear and easy to read?  Very clear and easy to read.	
	Implications of the major findings clearly stated? Yes certainly.	
	Have gaps in the literature been dealt with adequately? Yes I think so; there are still unknown factors in this science, as is true in all areas of science, but you have made these perfectly clear.	
	Recommendations address limitations of literature? Yes, very clearly.	
Conclusions	Are the conclusions reached valid? Yes, I agree with the conclusions 100%.	Thank you for your comment.
Overall presentation and relevancy	Is the review well-structured and organized? Stunningly well organized and written.	Thank you for your comments.
	Are the main points clearly presented? Totally clear.	
	Is it relevant to clinical medicine? Yes absolutely, this	

Page of draft report (section)	Comment	Response
	) (peer reviewer)	
Paul Pottinger, ME	issue arises in my medical practice virtually every week.  Is it important for public policy or public health? Yes it is of huge importance, we need to reduce costs and reduce human suffering by increasing access to this safe, proven, effective technology.  My overall comments are that this report is striking in its organization, clear in its methods and conclusions, and a pleasure to read. I hope there is a way for the authors to share this report with their counterparts in other States, to save them the cost and effort of repeating what is essentially a flawless product.  My only thought for the future—not to detract from this report, but to place another technique on your agenda down the line—is to consider looking at the evidence supporting an alternative technique of treating the same syndrome by delivering dessicated stool via oral capsules. A rising body of literature suggests that this technique may be a safe, effective option for a subset of recurrent CDI patients, and it is one that should in fact be more affordable because colonoscopy is not necessary, and should be more tolerable because nasogastric tubing is not used. This emerging body of literature does not replace the need	
	for current techniques, but may become an attractive option in certain circumstances in the very near future.	
Quality of the report	Quality Of the Report (Click in the gray box to make your selection)  Superior X X  Good  Fair	Thank you.
	Poor	



# Comprehensive Evidence-Based Health Technology Assessment Peer Review Form

Thank you for your willingness to read and comment on the Comprehensive Evidence-Based Health Technology Assessment Review for hip resurfacing. Your contribution and time are greatly appreciated.

This form can be filled out electronically on your personal computer. Enter your identification information and comments directly into the shaded areas; use the **TAB** key to move from field to field. Please enter the section, page, and line numbers where relevant. The shaded comment field will expand as you type, allowing for unlimited text. You have been provided comment fields in each section. Should you have more comments than this allows for, please continue with a blank page. Additionally, we are very interested in your evaluation of the ease of use of our Peer Review Form. Please use the last field to enter suggestions for improvement.

When the Peer Review form is complete, save it to your hard drive and return as an e-mail attachment to robin@specri.com

If you have questions or concerns please contact Robin Hashimoto, PhD at the email above.

From Christina Surawicz

Sept 13, 2016

# **INTRODUCTION Comments**

While reviewing this section please keep the following questions in mind, but please comment on any point:

- Overview of topic is adequate? YES
- Topic of assessment is important to address? YES
- Public policy and clinical relevance are well defined? YES

### **BACKGROUND Comments**

### While reviewing this section please keep the following questions in mind, but please comment on any point:

- Content of literature review/background is sufficient? THE BACKGROUND LITERATURE ON RX OF CDI AND IBD WAS VERY FLAWED. I HAVE EDITED AND UDPATED AND WILL ATTACH SEPARATE WORD DOCUMENTS.
- ALSO P 44, COLLAGENOUS AND LYM COLITIS ARE NOT TYPES OF IBD, THIS SHOULD BE DELETED. ALSO CAN ADD SECOND PEAK OF IBD IN OLDER INDIVIDUALS
- P 41 DEFINITION OF RECURRENCE IS WRONG, DO NOT NEED TO HAVE 6-8 WK TAPER, THAT IS OUTDATED.
   ALSO NOTE THAT RECURRENT AND REFRACTORY ARE DIFFERENT, I HAVE CLARIFIED THAT IN THE WORD DOCUMENT.

# **REPORT OBJECTIVES & KEY QUESTIONS Comments**

### While reviewing this section please keep the following questions in mind, but please comment on any point:

- Aims/objectives clearly address relevant policy and clinical issue? YES
- Key questions clearly defined and adequate for achieving aims? YES

### **METHODS Comments**

### While reviewing this section please keep the following questions in mind, but please comment on any point:

- Method for identifying relevant studies is adequate? YES
- Criteria for the inclusion and exclusion of studies is appropriate? YES
- Method for Level of Evidence (LoE) rating is appropriate and clearly explained? YES
- Data abstraction and analysis/review are adequate? YES

# **RESULTS Comments**

# While reviewing this section please keep the following questions in mind, but please comment on any point:

- Amount of detail presented in the results section appropriate? YES
- Key questions are answered? ONE THING THAT CAN BE CONFUSING IS THE DIFFERENCE BETWEEN
  RECURRENT AND REFRACTORY, FOR INSTANCE THE CAMMAROTA STUDY CLEARLY HAD MUCH MORE SICK PTS
  IN IT, WITH THE PSEUDOMEMBRANES, SO SICK THAT THE FIRST 2 DIED WHICH IS WHY THEY CHANGED THE
  PROTOCOL. BUT FOR PURPOSES OF THIS REVIEW, IT DOES MAKE SENSE TO COMBINE THOSE 2 RCTS.
- NOTE NEW RCT FROM KELLY IN ANNALS INTERN MED AUGUST 2016 ALSO POSITIVE.
- IF YOU WANT TO ADD FOCUS ON SEVERE/REFRACTORY THE SERIES OF MONIKA FISCHER SHOULD BE INCLUDED. THE INDICATIONS FOR FMT IN THIS GROUP ARE UNCLEAR SO PROB BETTER TO EXCLUDE.
- ALSO THE EVIDENCE THAT FMT CAUSES IS FLARES OF IBD IS GOOD SO I WOULD STATE THIS MORE STRONLGY
- Figures, tables and appendices clear and easy to read? yes

- Implications of the major findings clearly stated? Not really stated
- Have gaps in the literature been dealt with adequately? Yes
- Recommendations address limitations of literature? Yes

### **CONCLUSIONS Comments**

### While reviewing this section please keep the following questions in mind, but please comment on any point:

- Are the conclusions reached valid. YES WITH THE 2 FOLLOWING SUGGESTIONS
- KQ1.
- Your text: Moreover, FMT procedure(s) for treatment of recurrent CDI (after the initial allocated treatment) were performed in significantly fewer patients in the FMT group than in the vancomycin group

•

- My comment: This is confusing. What you mean to say is that since there were more people with recurrences in the vanco group, more of them had to have a "rescue" or repeat FMT.
- KQ3
- Your text" quality of evidence was insufficient to draw no firm conclusions can be drawn.
- My comment: the quality of evidence was insufficient to draw a firm conclusion. IS THIS WHAT YOU MEAN TO SAY?

•

#### **OVERALL PRESENTATION and RELEVANCY Comments**

### While reviewing this section please keep the following questions in mind, but please comment on any point:

- Is the review well structured and organized? YES
- Are the main points clearly presented? YES
- Is it relevant to clinical medicine? DEFINITELY YES, SEE BELOW
- Is it important for public policy or public health? I AM NOT SURE THAT IT IS.

•

WHAT IS SURPRISING IS THAT THE TREATMENT THAT IS SO EFFECTIVE CLINICALLY, IE FMT FOR RCDI, HAS LOW QUALITY EVIDENCE AND THAT THE TREATMENT THAT SHOULD BE ONLY DONE IN RCTS IN MY OPINION HAS MODERATE QUALITY OF EVIDENCE. I ASSUME THIS IS BECAUSE OF FLAWS IN THE RCTS OF THE FORMER. CLINCALLY, THIS THERAPYFOR RCDI IS SO EFFECTIVE, AND THERE IS NOTHING ELSE AS GOOD SINCE THE ONLY OTHER OPTION FOR PTS WITH MULTIPLE RECURRENCES IS TO STAY ON VANCO FOR THE REST OF THEIR LIVES. I AM NOT SURE THAT THIS IS CLEAR IN THE REPORT. FMT IS THE MOST SUCCESSFUL THERAPY FOR RCDI, I STARTED DOING IT IN 2004, AND WOULD NOT HAVE CONTINUED IF NOT FOR THE EFFICACY AND FOR LACK OF OTHER OPTIONS.

ALSO NOTE IN THE REFERENCES, THAT REFERENCE #37 IN THE FIRST SET OF REFERENCES IS INCORRECT AND THAT REF.#35 IN THE SECOND SET IS WRONG, THEY ARE ORTHOPEDIC PAPERS.

QUALITY OF REPORT
Quality Of the Report
(Click in the gray box to make your selection)
Superior X X
Good
Fair 🗌
Poor



# Comprehensive Evidence-Based Health Technology Assessment Peer Review Form

Thank you for your willingness to read and comment on the Comprehensive Evidence-Based Health Technology Assessment Review for FMT. Your contribution and time are greatly appreciated.

This form can be filled out electronically on your personal computer. Enter your identification information and comments directly into the shaded areas; use the **TAB** key to move from field to field. Please enter the section, page, and line numbers where relevant. The shaded comment field will expand as you type, allowing for unlimited text. You have been provided comment fields in each section. Should you have more comments than this allows for, please continue with a blank page. Additionally, we are very interested in your evaluation of the ease of use of our Peer Review Form. Please use the last field to enter suggestions for improvement.

When the Peer Review form is complete, save it to your hard drive and return as an e-mail attachment to robin@specri.com

If you have questions or concerns please contact Robin Hashimoto, PhD at the email above.

Review of Fecal Microbiota Transplantation monograph.

9/22/16

Paul Pottinger, MD, DTM&H, FIDSA
Associate Professor of Medicine
Division of Allergy & Infectious Diseases
Associate Director, Infectious Diseases Training Program
Director, UWMC Antimicrobial Stewardship Program
Director, UWMC Tropical Medicine& Infectious Diseases Clinic
University of Washington Medical Center
1959 NE Pacific Street
Box 356130
BB-302
Seattle, WA 98195

Paging (206) 598-6190 Fax (206) 598-8666 abx@uw.edu

### **INTRODUCTION Comments**

### While reviewing this section please keep the following questions in mind, but please comment on any point:

- Overview of topic is adequate? Yes
- Topic of assessment is important to address? Yes
- Public policy and clinical relevance are well defined? Yes

This topic is clearly one of great importance to the health of Washingtonians (indeed, patients and their families nationwide), and this is made clear in the introduction.

### **BACKGROUND Comments**

# While reviewing this section please keep the following questions in mind, but please comment on any point:

• Content of literature review/background is sufficient? Yes. The background information is clear and easy to understand.

### **REPORT OBJECTIVES & KEY QUESTIONS Comments**

# While reviewing this section please keep the following questions in mind, but please comment on any point:

- Aims/objectives clearly address relevant policy and clinical issue? Absolutely yes.
- Key questions clearly defined and adequate for achieving aims? Yes, very clearly. I am very impressed with the scope and technique employed here.

### **METHODS Comments**

# While reviewing this section please keep the following questions in mind, but please comment on any point:

• Method for identifying relevant studies is adequate? Yes, totally.

- Criteria for the inclusion and exclusion of studies is appropriate? Yes (with note that a relevant study has been published since the time of this review, by Kelly et al, Ann Int Med 2016. If possible, that study should be included in the final draft).
- Method for Level of Evidence (LoE) rating is appropriate and clearly explained? Yes.
- Data abstraction and analysis/review are adequate? Yes, very clear and exhaustive.

### **RESULTS Comments**

### While reviewing this section please keep the following questions in mind, but please comment on any point:

- Amount of detail presented in the results section appropriate? Yes, more than I would have expected.
- Key questions are answered? Yes.
- Figures, tables and appendices clear and easy to read? Very clear and easy to read.
- Implications of the major findings clearly stated? Yes certainly.
- Have gaps in the literature been dealt with adequately? Yes I think so; there are still unknown factors in this science, as is true in all areas of science, but you have made these perfectly clear.
- Recommendations address limitations of literature? Yes, very clearly.

### **CONCLUSIONS Comments**

### While reviewing this section please keep the following questions in mind, but please comment on any point:

Are the conclusions reached valid? Yes, I agree with the conclusions 100%.

### **OVERALL PRESENTATION and RELEVANCY Comments**

# While reviewing this section please keep the following questions in mind, but please comment on any point:

- Is the review well structured and organized? Stunningly well organized and written.
- Are the main points clearly presented? Totally clear.
- Is it relevant to clinical medicine? Yes absolutely, this issue arises in my medical practice virtually every week.
- Is it important for public policy or public health? Yes it is of huge importance, we need to reduce costs and reduce human suffering by increasing access to this safe, proven, effective technology.

My overall comments are that this report is striking in its organization, clear in its methods and conclusions, and a pleasure to read. I hope there is a way for the authors to share this report with their counterparts in other States, to save them the cost and effort of repeating what is essentially a flawless product.

My only thought for the future—not to detract from this report, but to place another technique on your agenda down the line—is to consider looking at the evidence supporting an alternative technique of treating the same syndrome by delivering dessicated stool via oral capsules. A rising body of literature suggests that this technique may be a safe, effective option for a subset of recurrent CDI patients, and it is one that should in fact be more affordable because colonoscopy is not necessary, and should be more tolerable because nasogastric tubing is not

used. This emerging body of literature does not replace the need for current techniques, but may become an attractive option in certain circumstances in the very near future.

QUALITY OF REPORT
Quality Of the Report (Click in the gray box to make your selection)
Superior X
Good
Fair 🗌
Poor