CADTH

CADTH REIMBURSEMENT REVIEW

Clinician Input

patiromer (Veltassa)

Otsuka Canada Pharmaceuticals Inc.

Indication: For the treatment of hyperkalemia in adults with chronic kidney disease (eGFR ≥15mL/min/1.73m)

November 23, 2020

CADTH

CADTH Drug Reimbursement Review ClinicianGroup Input Template

CADTH Project Number	
Generic Drug Name (Brand Name)	**Veltassa (Patiromer)**
Indication	**Treatment of hyperkalemia**
Name of the Clinician Group	**Scarborough Regional Nephrology Program**
Author of the Submission	**Dr. Paul Tam**
Contact information	Name: Dr. Paul Tam Title: Chief and Medical Director - Scarborough Regional Nephrology Program Email: [redacted] Phone: [redacted]

1. About Your Clinician Group

Please describe the purpose of your organization. Include a link to your website (if applicable).

Group practice of 10 nephrologists for the Scarborough Regional Nephrology Program at Scarborough Health Network (SHN), with > 900 patients on dialysis and >4,000 CKD patients.

2. Information Gathering

Please describe how you gathered the information included in the submission.

From or practice sample: Sample of 519 office patients with hyperkalemia (K> 5.5), 117 were on Kayexalate as of January 2020.

3. Current treatments

3.1. Describe the current treatment paradigm for the disease

Focus on the Canadian context.

Please include drug and non-drug treatments.

Dietary restriction and Kayexalate (Polystyrene sulfonate)

Drugs without Health Canada approval for use in the management of the indication of interest may be relevant if they are routinely used in Canadian clinical practice. Are such treatments supported by clinical practice guidelines?

Treatments available through special access programs are relevant.

Do current treatments modify the underlying disease mechanism? Target symptoms?

Response:

Hyperkalemia can be a result of renal failure especially Diabetic nephropathy compounded by medical treatment, such as ACE inhibitors, ACE Receptor Blockers (ARB), and Spironolactone.

4. Treatment goals

4.1. What are the most important goals that an ideal treatment would address?

Examples: Prolong life, delay disease progression, improve lung function, prevent the need for organ transplant, prevent infection or transmission of disease, reduce loss of cognition, reduce the severity of symptoms, minimize adverse effects, improve health-related quality of life, increase the ability to maintain employment, maintain independence, reduce burden on caregivers.

Response:

Treatment of hyperkalemia will optimize medical therapy for cardiac conditions, potentially reducing mortality, decrease hospitalization and ER visits.

5. Treatment gaps (unmet needs)

5.1. Considering the treatment goals in Section 4, please describe goals (needs) that are not being met by currently available treatments.

Examples:

- *Not all patients respond to available treatments*
- *Patients become refractory to current treatment options*
- *No treatments are available to reverse the course of disease*
- *No treatments are available to address key outcomes*
- *Treatments are needed that are better tolerated*
- *Treatment are needed to improve compliance*
- *Formulations are needed to improve convenience*

Response:

Existing treatment with Kayexalate can cause potential complications in the GI tract. It has a high sodium load and therefore bad for cardiac patients in same circumstances cause bowel perforation.

5.2. Which patients have the greatest unmet need for an intervention such as the drug under review?

Would these patients be considered a subpopulation or niche population?

Describe characteristics of this patient population.

Would the drug under review address the unmet need in this patient population?

Response:

Hyperkalemia is prevalent in renal failure especially in diabetic patients and patients on treatment with Cardiac drugs. (See above 3.1)

6. Place in therapy

6.1. How would the drug under review fit into the current treatment paradigm?

Is there a mechanism of action that would complement other available treatments, and would it be added to other treatments?

Is the drug under review the first treatment approved that will address the underlying disease process rather than being a symptomatic management therapy?

Would the drug under review be used as a first-line treatment, in combination with other treatments, or as a later (or last) line of treatment?

Is the drug under review expected to cause a shift in the current treatment paradigm?

Response:

The drug under review will make therapeutic treatment much safer for these patients. Other available treatments, such as diuretics and bicarbonate bring on complications, especially in renal and cardiac patients.

6.2. Please indicate whether or not it would be appropriate to recommend that patients try other treatments before initiating treatment with the drug under review. Please provide a rationale from your perspective.

If so, please describe which treatments should be tried, in what order, and include a brief rationale.

Response:

Patients would have been asked to restrict potassium intake and add other drugs that are complicated and potentially harmful.

6.3. How would this drug affect the sequencing of therapies for the target condition?

If appropriate for this condition, please indicate which treatments would be given after the therapy has failed and specify whether this is a significant departure from the sequence employed in current practice.

Would there be opportunity to treat patients with this same drug in a subsequent line of therapy? If so, according to what parameters?

Response:

Mostly patient has no alternative other than diet. Often treatment such as diuretic and sodium bicarbonate can cause side effects in renal failure patients especially those with a cardiac condition.

6.4. Which patients would be best suited for treatment with the drug under review?

Which patients are most likely to respond to treatment with the drug under review?

Which patients are most in need of an intervention?

Would this differ based on any disease characteristics (e.g., presence or absence of certain symptoms, stage of disease)?

Response:

This agent will allow us to optimize therapeutic treatment. It is well tolerated and has little interaction with other medication, important in renal and cardiac patients who are usually taking a lot of medications. It has low sodium load in the exchange resin and therefore an added benefit to these groups of patients.

6.5. How would patients best suited for treatment with the drug under review be identified?

Examples: *Clinician examination or judgement, laboratory tests (specify), diagnostic tools (specify)*

Is the condition challenging to diagnose in routine clinical practice?

Are there any issues related to diagnosis?(e.g., tests may not be widely available, tests may be available at a cost, uncertainty in testing, unclear whether a scale is accurate or the scale may be subjective, variability in expert opinion.)

Is it likely that misdiagnosis occurs in clinical practice (e.g., underdiagnosis)?

Should patients who are pre-symptomatic be treated considering the mechanism of action of the drug under review?

Response:

Patients can be easily identified by a laboratory test - measuring serum potassium.

6.6. Which patients would be least suitable for treatment with the drug under review?

Response:

Only given to indicated patients, usually no contraindications. Good tolerability.

6.7. Is it possible to identify those patients who are most likely to exhibit a response to treatment with the drug under review?

If so, how would these patients be identified?

Response:

Patients with renal failure and congested heart failure.

6.8. What outcomes are used to determine whether a patient is responding to treatment in clinical practice?

Are the outcomes used in clinical practice aligned with the outcomes typically used in clinical trials?

Response:

A laboratory test to measure serum potassium.

6.9. What would be considered a clinically meaningful response to treatment?

Examples:

- *Reduction in the frequency or severity of symptoms (provide specifics regarding changes in frequency, severity, and so forth)*
- *Attainment of major motor milestones*
- *Ability to perform activities of daily living*
- *Improvement in symptoms*
- *Stabilization (no deterioration) of symptoms*

Consider the magnitude of the response to treatment. Is this likely to vary across physicians?

Response:

We can optimize the treatment for renal and cardiac patients without fear of hyperkalemia which is potentially life-threatening and therefore limits the ability to maximum life-saving treatments.

6.10. How often should treatment response be assessed?

Response:

Patients have a stable potassium level.

6.11. What factors should be considered when deciding to discontinue treatment?

Examples:

- *Disease progression (specify; e.g., loss of lower limb mobility)*
- *Certain adverse events occur (specify type, frequency, and severity)*
- *Additional treatment becomes necessary (specify)*

Response:

When a patient reaches dialysis. Even then it can minimize the frequency of dialysis by maintaining stable potassium.

6.12. What settings are appropriate for treatment with the drug under review?

Examples: Community setting, hospital (outpatient clinic), specialty clinic

Response:

Community and specialist clinics. The drug is simple to use.

6.13. For non-oncology drugs, is a specialist required to diagnose, treat, and monitor patients who might receive the drug under review?

If so, which specialties would be relevant?

Response:

No, medication is relatively safe.

7. Additional information

7.1. Is there any additional information you feel is pertinent to this review?

Response:

Hyperkalemia presents a challenge to the management of the group of patients mentioned above. A stable and optimal level of potassium is shown to reduce morbidity and mortality.

8. Conflict of Interest Declarations

To maintain the objectivity and credibility of the CADTH drug review programs, all participants in the drug review processes must disclose any real, potential, or perceived conflicts of interest. This conflict of interest declaration is required for participation. Declarations made do not negate or preclude the use of the clinician group input. CADTH may contact your group with further questions, as needed. Please see the *Procedures for CADTH Drug Reimbursement Reviews* (section 6.3) for further details.

1. Did you receive help from outside your clinician group to complete this submission? If yes, please detail the help and who provided it.

   No

2. Did you receive help from outside your clinician group to collect or analyze any information used in this submission? If yes, please detail the help and who provided it.

   No

3. List any companies or organizations that have provided your group with financial payment over the past two years AND who may have direct or indirect interest in the drug under review. **Please note that this is required for each clinician that contributed to the input—please add more tables as needed (copy and paste). It is preferred for all declarations to be included in a single document.**

Declaration for Clinician 1

Clinician Information	
Name	*Dr. Paul Tam*
Position	*Chief - Scarborough Regional Nephrology Program*
Date	*13 November 2020*
☒	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration				
Company	**Check Appropriate Dollar Range**			
	$0 to 5,000	**$5,001 to 10,000**	**$10,001 to 50,000**	**In Excess of $50,000**
Otsuka	☐	☑	☐	☐

Janssen	☐	☑	☐	☐
Amgen	☑	☐	☐	☐
AstraZeneca	☑	☐	☐	☐
Baxter	☑	☐	☐	☐
Bayer	☑	☐	☐	☐

Declaration for Clinician 2

Clinician Information	
Name	*Dr. Robert Ting*
Position	*Nephrologist*
Date	*13 November 2020*
☒	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration				
Company	**Check Appropriate Dollar Range**			
	$0 to 5,000	**$5,001 to 10,000**	**$10,001 to 50,000**	**In Excess of $50,000**
AstraZeneca	☐	☑	☐	☐
Janssen	☐	☑	☐	☐
Otsuka	☑	☐	☐	☐
Bayer	☑	☐	☐	☐
Boehringer Ingelheim	☑	☐	☐	☐
Pfizer	☑	☐	☐	☐
Merck	☑	☐	☐	☐

Declaration for Clinician 3

Clinician Information	
Name	*Dr. Janet Roscoe*
Position	*Nephrologist*
Date	*13 November 2020*
☒	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration				
Company	**Check Appropriate Dollar Range**			
	$0 to 5,000	**$5,001 to 10,000**	**$10,001 to 50,000**	**In Excess of $50,000**
Otsuka	☑	☐	☐	☐
	☐	☐	☐	☐

Declaration for Clinician 4

Clinician Information	
Name	*Dr. Gordon Nagai*
Position	*Nephrologist*
Date	*13 November 2020*
☒	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration				
Company	**Check Appropriate Dollar Range**			
	$0 to 5,000	**$5,001 to 10,000**	**$10,001 to 50,000**	**In Excess of $50,000**
NIL	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

Declaration for Clinician 5

Clinician Information	
Name	*Dr. Jason Fung*
Position	*Nephrologist*
Date	*13 November 2020*
☒	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration				
Company	**Check Appropriate Dollar Range**			
	$0 to 5,000	**$5,001 to 10,000**	**$10,001 to 50,000**	**In Excess of $50,000**
NIL	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

Declaration for Clinician 6

Clinician Information	
Name	*Dr. Tabo Sikaneta*
Position	*Nephrologist*
Date	*13 November 2020*
☒	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration				
Company	**Check Appropriate Dollar Range**			
	$0 to 5,000	**$5,001 to 10,000**	**$10,001 to 50,000**	**In Excess of $50,000**
NIL	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

Declaration for Clinician 7

Clinician Information	
Name	*Dr. Simon Tsui*
Position	*Nephrologist*
Date	*13 November 2020*
☒	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration				
Company	**Check Appropriate Dollar Range**			
	$0 to 5,000	**$5,001 to 10,000**	**$10,001 to 50,000**	**In Excess of $50,000**
NIL	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

Declaration for Clinician 8

Clinician Information	
Name	*Dr. Denise Tam*
Position	*Nephrologist*
Date	*13 November 2020*
☒	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration				
Company	**Check Appropriate Dollar Range**			
	$0 to 5,000	**$5,001 to 10,000**	**$10,001 to 50,000**	**In Excess of $50,000**
NIL	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

Declaration for Clinician 9

Clinician Information	
Name	*Dr. Mark Andrew Wong*
Position	*Nephrologist*
Date	*13 November 2020*
☒	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration

Company	Check Appropriate Dollar Range			
	$0 to 5,000	**$5,001 to 10,000**	**$10,001 to 50,000**	**In Excess of $50,000**
NIL	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

Declaration for Clinician 10

Clinician Information	
Name	*Dr. Steve Wong*
Position	*Nephrologist*
Date	*13 November 2020*
☒	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration

Company	Check Appropriate Dollar Range			
	$0 to 5,000	**$5,001 to 10,000**	**$10,001 to 50,000**	**In Excess of $50,000**
NIL	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

CADTH Drug Reimbursement Review
Clinician Group Input Template

CADTH Project Number	
Generic Drug Name (Brand Name)	**Patiromer (Veltassa) and Sodium Zirconium Silicate (Lokelma)**
Indication	**Hyperkalemia, adults (CKD)**
Name of the Clinician Group	**Sunnybrook. Nephrology**
Author of the Submission	**Sheldon Tobe**
Contact information	Name: Sheldon Tobe Title: MD Email [redacted] Phone: [redacted]

1. About Your Clinician Group

Please describe the purpose of your organization. Include a link to your website (if applicable).

Nephrology

2. Information Gathering

Please describe how you gathered the information included in the submission.

Patient care, ambulatory, emergent, and in hospital

3. Current treatments

3.1. Describe the current treatment paradigm for the disease

Focus on the Canadian context.

Please include drug and non-drug treatments.

Drugs without Health Canada approval for use in the management of the indication of interest may be relevant if they are routinely used in Canadian clinical practice. Are such treatments supported by clinical practice guidelines?

Treatments available through special access programs are relevant.

Do current treatments modify the underlying disease mechanism? Target symptoms?

Response:

Diet, diuretics, sodium bicarbonate, dialysis, Kayexalate, Calcium Resonium

Current treatments are not evidence based and other than dialysis do not have data to support long term safety or efficacy.

Treatments do not modify the underlying disease mechanism. They only target the hyperkalemia.

4. Treatment goals

4.1. What are the most important goals that an ideal treatment would address?

Examples: Prolong life, delay disease progression, improve lung function, prevent the need for organ transplant, prevent infection or transmission of disease, reduce loss of cognition, reduce the severity of symptoms, minimize adverse effects, improve health-related quality of life, increase the ability to maintain employment, maintain independence, reduce burden on caregivers.

Response:

For some patients, they are life saving, preventing dangerously high hyperkalemia. For all patients, they preserve their lifestyle by allowing them to have a diet closer to what they have eaten for their whole lives. Particularly important for patients in their 80's and 90's.

5. Treatment gaps (unmet needs)

5.1. Considering the treatment goals in Section 4, please describe goals (needs) that are not being met by currently available treatments.

Examples:

- *Not all patients respond to available treatments*
- *Patients become refractory to current treatment options*
- *No treatments are available to reverse the course of disease*
- *No treatments are available to address key outcomes*
- *Treatments are needed that are better tolerated*
- *Treatment are needed to improve compliance*

- *Formulations are needed to improve convenience*

Response:

Diet, diuretics, sodium bicarbonate are all variably effective in any patient and are not effective for chronic use. Their lack of efficacy is what led the potassium in most of our patients to be high in the first place. Kayexalate is highly unpleasant, comes in a huge expensive tub (but is inexpensive for individual doses), and is linked to bowel necrosis in a small number of patients. Its efficacy is shown only by one small short lasting study.

These therapies in the acute situation do not reliably lower potassium into the normal range. In the chronic setting, they can not be maintained with any efficacy. Also they lead to unacceptable side effects and cause challenging lifestyle changes.

5.2. Which patients have the greatest unmet need for an intervention such as the drug under review?

Would these patients be considered a subpopulation or niche population?

Describe characteristics of this patient population.

Would the drug under review address the unmet need in this patient population?

Response:

Patients with chronic kidney disease who require treatment with ACEi's or ARB's, or MRA's such as patients who also have diabetes or heart failure.

6. Place in therapy

6.1. How would the drug under review fit into the current treatment paradigm?

Is there a mechanism of action that would complement other available treatments, and would it be added to other treatments?

Is the drug under review the first treatment approved that will address the underlying disease process rather than being a symptomatic management therapy?

Would the drug under review be used as a first-line treatment, in combination with other treatments, or as a later (or last) line of treatment?

Is the drug under review expected to cause a shift in the current treatment paradigm?

Response:

Treatment with these agents allows patients to remain on appropriate dosing of ACEi/ARB's/MRAs and ARNI's which are associated with improved renal and CV outcomes.

These two drugs are the first under review for hyperkalemia.

The drugs under review are to be used in combination with diet.

The new agents will cause a shift in the current treatment paradigm. The current paradigm is not evidence based, it is very heterogeneous with regional variations, and is largely unproven and potentially dangerous

6.2. Please indicate whether or not it would be appropriate to recommend that patients try other treatments before initiating treatment with the drug under review. Please provide a rationale from your perspective.

If so, please describe which treatments should be tried, in what order, and include a brief rationale.

Response:

Diet, but if the potassium is too high, then they should be treated acutely. If the potassium is dangerously high, then dialysis should also be initiated, using the new medications to keep patients safe until dialysis can be started.

6.3. How would this drug affect the sequencing of therapies for the target condition?

If appropriate for this condition, please indicate which treatments would be given after the therapy has failed and specify whether this is a significant departure from the sequence employed in current practice.

Would there be opportunity to treat patients with this same drug in a subsequent line of therapy? If so, according to what parameters?

Response:

Acutely, it should be started immediately. Chronically it should be started after the failure of diet.

6.4. Which patients would be best suited for treatment with the drug under review?

Which patients are most likely to respond to treatment with the drug under review?

Which patients are most in need of an intervention?

Would this differ based on any disease characteristics (e.g., presence or absence of certain symptoms, stage of disease)?

Response:

All patients seem to respond. Patients most in need are those with acute hyperkalemia who would spend time in emergency unnecessarily, and chronic patients who can not be on appropriate dosed ACEi/ARB/MRA because of hyperkalemia.

6.5. How would patients best suited for treatment with the drug under review be identified?

Examples: Clinician examination or judgement, laboratory tests (specify), diagnostic tools (specify)

Is the condition challenging to diagnose in routine clinical practice?

Are there any issues related to diagnosis? (e.g., tests may not be widely available, tests may be available at a cost, uncertainty in testing, unclear whether a scale is accurate or the scale may be subjective, variability in expert opinion.)

Is it likely that misdiagnosis occurs in clinical practice (e.g., underdiagnosis)?

Should patients who are pre-symptomatic be treated considering the mechanism of action of the drug under review?

Response:Patients are identified with hyperkalemia from routine lab testing of patients at higher risk, like patients with CKD and diabetes or heart failure on MRA/ARB/ACEi

Click here to enter response.

6.6. Which patients would be least suitable for treatment with the drug under review?

Response:

Patients with normal potassium levels.

6.7. Is it possible to identify those patients who are most likely to exhibit a response to treatment with the drug under review?

If so, how would these patients be identified?

Response:

In studies with these agents, patients with a broad range of comorbidities and hyperkalemia had the same lowering of potassium.

6.8. What outcomes are used to determine whether a patient is responding to treatment in clinical practice?

Are the outcomes used in clinical practice aligned with the outcomes typically used in clinical trials?

Response:

Serum potassium level.

6.9. What would be considered a clinically meaningful response to treatment?

Examples:

- *Reduction in the frequency or severity of symptoms (provide specifics regarding changes in frequency, severity, and so forth)*
- *Attainment of major motor milestones*
- *Ability to perform activities of daily living*
- *Improvement in symptoms*
- *Stabilization (no deterioration) of symptoms*

Consider the magnitude of the response to treatment. Is this likely to vary across physicians?

Response:
Normalization of serum potassium level.

6.10. How often should treatment response be assessed?

Response:

Acute setting: varies with severity of hyperkalemia.Could be every 2 hours.

Chronic setting: with regularly planned lab testing.

6.11. What factors should be considered when deciding to discontinue treatment?

Examples:

- *Disease progression (specify; e.g., loss of lower limb mobility)*
- *Certain adverse events occur (specify type, frequency, and severity)*
- *Additional treatment becomes necessary (specify)*

Response:

Acute setting: potassium in normal range

Chronic setting: potassium in normal range with less frequently dosed therapy.

6.12. What settings are appropriate for treatment with the drug under review?

Examples: Community setting, hospital (outpatient clinic), specialty clinic

Response:

Community setting. Patients with CKD and diabetes or heart failure treated with ARB/ACEI/MRA (any of these) with hyperkalemia.

Acute setting: Ambulatory patient with elevated potassium (up to 6.4) to treat the patient and keep them out of the ER. In ER, patients with elevated potassium to lower it without need for dialysis. In hospital to lower potassium in admitted patients without the need for dialysis.

6.13. For non-oncology drugs, is a specialist required to diagnose, treat, and monitor patients who might receive the drug under review?

If so, which specialties would be relevant?

Response:

Not really.

7. Additional information

7.1. Is there any additional information you feel is pertinent to this review?

Response:

N/A

8. Conflict of Interest Declarations

To maintain the objectivity and credibility of the CADTH drug review programs, all participants in the drug review processes must disclose any real, potential, or perceived conflicts of interest. This conflict of interest declaration is required for participation. Declarations made do not negate or preclude the use of the clinician group input. CADTH may contact your group with further questions, as needed. Please see the *Procedures for CADTH Drug Reimbursement Reviews* (section 6.3) for further details.

1. Did you receive help from outside your clinician group to complete this submission? If yes, please detail the help and who provided it.

None

2. Did you receive help from outside your clinician group to collect or analyze any information used in this submission? If yes, please detail the help and who provided it.

None

3. List any companies or organizations that have provided your group with financial payment over the past two years AND who may have direct or indirect interest in the drug under review. **Please note that this is required for <u>each clinician</u> that contributed to the input — please add more tables as needed (copy and paste). It is preferred for all declarations to be included in a single document.**

Declaration for Clinician 1

Clinician Information	
Name	*Sheldon Tobe*
Position	*Staff nephrologist at Sunnybrook Hospital*
Date	*21-11-2020*
☒	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration				
Company	**Check Appropriate Dollar Range**			
	$0 to 5,000	**$5,001 to 10,000**	**$10,001 to 50,000**	**In Excess of $50,000**
Otsuka	☒	☐	☐	☐
Astra-Zeneca	☒	☐	☐	☐
Add or remove rows as required	☐	☐	☐	☐

Declaration for Clinician 2

Clinician Information	
Name	*Please state full name*
Position	*Please state currently held position*
Date	*Please add the date form was completed (DD-MM-YYYY)*
☐	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration

Company	Check Appropriate Dollar Range			
	$0 to 5,000	$5,001 to 10,000	$10,001 to 50,000	In Excess of $50,000
Add company name	☐	☐	☐	☐
Add company name	☐	☐	☐	☐
Add or remove rows as required	☐	☐	☐	☐

Declaration for Clinician 3

Clinician Information	
Name	*Please state full name*
Position	*Please state currently held position*
Date	*Please add the date form was completed (DD-MM-YYYY)*
☐	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration

Company	Check Appropriate Dollar Range			
	$0 to 5,000	$5,001 to 10,000	$10,001 to 50,000	In Excess of $50,000
Add company name	☐	☐	☐	☐
Add company name	☐	☐	☐	☐
Add or remove rows as required	☐	☐	☐	☐

Declaration for Clinician 4

Clinician Information	
Name	*Please state full name*
Position	*Please state currently held position*
Date	*Please add the date form was completed (DD-MM-YYYY)*
☐	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration

Company	Check Appropriate Dollar Range			
	$0 to 5,000	**$5,001 to 10,000**	**$10,001 to 50,000**	**In Excess of $50,000**
Add company name	☐	☐	☐	☐
Add company name	☐	☐	☐	☐
Add or remove rows as required	☐	☐	☐	☐

Declaration for Clinician 5

Clinician Information	
Name	*Please state full name*
Position	*Please state currently held position*
Date	*Please add the date form was completed (DD-MM-YYYY)*
☐	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration

Company	Check Appropriate Dollar Range			
	$0 to 5,000	**$5,001 to 10,000**	**$10,001 to 50,000**	**In Excess of $50,000**
Add company name	☐	☐	☐	☐
Add company name	☐	☐	☐	☐
Add or remove rows as required	☐	☐	☐	☐