Non- Investigational Medicinal Product (NIMP) of Interest	Lokelma		
Study Code	D9480C00016		
Edition Number	1.0		
Date	20 October 2022		
NCT Number	04566653		

Non-Interventional, Exploratory, Phase IV, Single-Blind, Cross-Sectional, Randomised, Cross-over Study Evaluating Patient Palatability and Preference of 3 Potassium Binders, Sodium Polystyrene Sulphonate (SPS) or Calcium Polystyrene Sulphonate (CPS), Sodium Zirconium Cyclosilicate (Lokelma<sup>®</sup>), and Calcium Patiromer Sorbitex (Veltassa®) in Patients with Chronic Kidney Disease and Hyperkalaemia (APPETIZE)

Study dates:	First subject enrolled: 23 October 2020
Study unless	
	Last subject last visit: 12 January 2022
	The analyses presented in this report are based on a clinical data
	lock date of 05 May 2022
Phase of development:	IV
Sponsor's Responsible Medical Officer:	PPD
	AstraZeneca Biopharmaceuticals Medical
	101 ORD, One Medimmune Way Gaithersburg
	MD 20878, United States of America
	C/
This study was performed in compliance with	th Good Clinical Practice, including the archiving of essential

This study was performed in compliance with Good Chinese -documents. This submission /document contains trade secrets and confidential commercial information, disclosure of which the stabilited without providing advance notice to AstraZeneca and opportunity to object.

#### Study centres

17 sites in 5 countries: 3 in Italy, 3 in France, 5 in Spain, 2 in the United States of America (US), and 4 in Canada

#### **Publications**

None at the time of writing this report.

### Objectives and criteria for evaluation

### Table S1Objectives and Endpoints

Objectives	Endpoints			
Primary				
• To compare patient-reported overall palatability (composite of taste, texture, smell, and mouthfeel) between Lokelma and Veltassa, and between Lokelma and sodium polystyrene sulphonate or calcium polystyrene sulphonate (S/CPS) in the US	<ul> <li>Difference in scores (0-40) for overall palatability of non-investigational medicinal products (NIMPs)</li> </ul>			
Secondary				
• To compare patient-reported overall palatability (composite of taste, texture, smell, and mouthfeel) between Lokelma and Veltassa, and between Lokelma and S/CPS in Canada	<ul> <li>Difference in scores (0-40) for overall palatability of NIMPs</li> </ul>			
• To compare patient-reported overall palatability (composite of taste, texture, smell, and mouthfeel) between Lokelma and Veltassa, and between Lokelma and S/CPS in the European Union (EU)	<ul> <li>Difference in scores (0-40) for overall palatability of NIMPs</li> </ul>			
• To compare patient-reported emotional response to overall palatability (composite of taste, texture, smell, and mouthfeel) between Lokelma and Veltassa, and between Lokelma and S/CPS in the US	• Difference in scores for feelings of appeal (4-36), engagement (4-36), and empowerment (4-36) regarding overall palatability of NIMPs using the AdSAM emotional response tool			
• To compare patient-reported emotional response to overall palatability (composite of taste, texture, smell, and mouthfeel) between Lokelma and Veltassa, and between Lokelma and S/CPS in Canada	• Difference in scores for feelings of appeal (4-36), engagement (4-36), and empowerment (4-36) regarding overall palatability of NIMPs using the AdSAM emotional response tool			

Objectives		Endpoints			
•	To compare patient-reported emotional response to overall palatability (composite of taste, texture, smell, and mouthfeel) between Lokelma and Veltassa, and between Lokelma and S/CPS in the EU	• Difference in scores for feelings of appeal (4-36), engagement (4-36), and empowerment (4-36) regarding overall palatability of NIMPs using the AdSAM emotional response tool			
•	To describe patient-reported preference for overall palatability (composite of taste, texture, smell, and mouthfeel) (scoring and non-verbal emotional response to each NIMP) of 3 currently marketed potassium (K+) binders (of Lokelma, Veltassa, and S/CPS in the US, Canada, and EU, respectively)	<ul> <li>Scoring of palatability (0-40)</li> <li>Appeal of palatability (4-36)</li> <li>Engagement of palatability (4-36)</li> <li>Empowerment of palatability (4-36)</li> <li>Overall composite emotional strength indicator scores (0-1200)</li> <li>Feelings towards palatability (including perceptual maps, sweet spot, emotional temperature, and emotion groups)</li> </ul>			
•	To describe and compare, based on the overall palatability experience, scoring, and emotional response for how willing patients would be to take each K+ binder to help manage their serum potassium (likelihood of adherence) in the US, Canada, and EU	<ul> <li>Scoring (0-10) for willingness to take a K+ binder</li> <li>Appeal (9-1) for willingness to take a K+ binder</li> <li>Engagement (9-1) for willingness to take a K+ binder</li> <li>Empowerment (1-9) for willingness to take a K+ binder</li> <li>Overall emotional strength indicator score (0-300) for willingness to take a K+ binder</li> <li>Feelings towards willingness to take a K+ binder (including perceptual maps, sweet spot, emotional temperature, and emotion groups)</li> </ul>			
•	To describe patient-reported preference by ranking the NIMPs, and derived preference based on the emotional strength indicator scores in the US, Canada, and EU	<ul> <li>Overall preference ranking of NIMPs (1, 2, or 3) of Lokelma, Veltassa, and S/CPS</li> <li>Use of Comparative AdSAM emotional strength indicator scores to derive overall preference</li> </ul>			

## Study design

APPETIZE was a non-interventional, Phase IV, exploratory, cross-over, active comparator controlled study to measure the palatability and preference of Lokelma versus Veltassa versus S/CPS.

The study population consisted of participants with dialysis and non-dialysis chronic kidney disease (CKD) and hyperkalaemia (HK), with 60 participants planned respectively in the US, Canada, and EU region (total of approximately 180 participants). Participants were to be randomised such that approximately 51 evaluable participants per country/region completed the study.

Randomisation occurred at Visit 2 (Day 1). All eligible participants were centrally randomly assigned in a 1:1:1:1:1:1:1 ratio to one of 6 treatment sequences using an integrated web recording system.

Randomisation was stratified by country; additionally, within each country respectively, the following was to be stratified:

- CKD participants with HK and dialysis-dependent, cap at approximately 50% of participants if possible
- CKD participants with HK and non-dialysis-dependent, cap at approximately 50% of participants if possible.

Participants were blinded to what they were tasting; site and sponsor personnel were not blinded and all efforts were to be made to ensure that site staff, who prepared and presented the NIMP to participants, maintained participant blinding.

# Target population and sample size

Participants had to have CKD defined by having an estimated glomerular filtration rate (eGFR) < 60 mL/min/1.73 m<sup>2</sup> (calculated using CKD-EPI equation) measured twice at least 90 days apart and had to have prevalent HK with serum K+ > 5 mmol/L.

A minimum of 60 participants respectively in the US, Canada, and EU region (total of approximately 180 participants) were to be randomised to NIMPs such that approximately 51 evaluable participants per country/region completed the study.

The primary endpoint was a palatability composite of taste, texture, smell, and mouthfeel, defined as the sum of each individual score. Assuming that the standard deviation (SD) and paired mean difference for all components was the same as for taste (ie, mean 1.2 and SD 2.7) and making the conservative assumption of perfect correlation between components, the same sample size of 51 evaluable participants per country/region was required. To allow for equal number of participants in each treatment sequence (comparable to 15% overall dropout risk), each country had to include 10 participants per randomised sequence (in total  $6 \times 10 = 60$  participants per country/region).

## Non-Investigational Medicinal Products (NIMPs)

**Lokelma:** 5 g for participants on dialysis and 10 g for non-dialysis participants per 45 mL water. Batch number: **CC** 

Veltassa: 8.4 g per 80 mL water. Batch number: CC

S/CPS: 15 g per 60 mL water. Batch numbers: CCI

Participants were instructed not to ingest the NIMPs. Instead, each participant was asked to take a sip/mouthful appropriate to them (not a full dose), swirl around the mouth for 5 seconds, and expel into a measuring cup before scoring/ranking each NIMP.

### NIMP groups and duration

The study consisted of 3 study periods: screening, randomisation/tasting, and follow-up. Screening procedures occurred within 7 days prior to Day 1. Randomisation and tasting of all 3 NIMPs occurred on Day 1. A follow-up telephone call or site visit to assess any adverse events was to occur at least one day after the tasting being completed. Thus, the duration of each participant's involvement was up to 9 days.

Each participant was handed single doses of each of the 3 NIMPs in a cross-over, side-by-side, sip-and-spit taste test with a palate cleanse between each tasting of a minimum of 30 minutes. Prior to live tasting, participants were trained on the sip and spit technique.

### Statistical methods

The interim database lock (DBL) occurred when the US completed the study. The final DBL occurred after the last participants completed the last visit as planned per protocol.

The primary analysis population was the full analysis set consisting of all randomised participants who have tasted at least one NIMP and who have completed any post-taste measurement, with participants being analysed as randomised, rather than as treated.

The primary endpoint was the mean of overall palatability score of each product. The primary analysis was to compare the mean of overall palatability score between Lokelma versus Veltassa, and Lokelma versus S/CPS in the US. The primary endpoint was analysed using a linear mixed effects model, as is commonly done for cross-over designs.

All safety parameters were analysed descriptively. Safety analyses were based on safety analysis set.

### **Study population**

In this study, 234 participants were screened: 27 in Italy, 14 in France, 32 in Spain, 123 in the US, and 38 in Canada. Among these, 147 were randomised to taste the 3 NIMPs. One hundred and forty-four (98.0%) participants completed the study and tasted the NIMPs (82 in North America and 62 in Europe).

Details on disposition are given in the table below:

Patient disposition	tient disposition Number (%) of subjects						
	Italy	France	Spain	US	Canada	Total	
Patients screened	27	14	32	123	38	234	
Patients enrolled <sup>a</sup>	27	14	32	123	38	234	
Patients who were not randomized	3	0	7	64	13	87	
Patients randomized	24 (100)	14 (100)	25 (100)	59 (100)	25 (100)	147 (100)	
Patients who received at least one NIMP	24 (100)	14 (100)	24 ( 96.0)	58 ( 98.3)	24 ( 96.0)	144 ( 98.0)	
Patients who did not receive NIMP	0	0	1 ( 4.0)	1 ( 1.7)	1 ( 4.0)	3 ( 2.0)	
Patients who completed all NIMP	24 (100)	14 (100)	24 ( 96.0)	58 ( 98.3)	24 ( 96.0)	144 ( 98.0)	
Patients who discontinued at least one NIMP	0	0	0	0	0	0	
Patients who completed study	24 (100)	14 (100)	24 ( 96.0)	58 (98.3)	24 ( 96.0)	144 ( 98.0)	
Patients who discontinued from study	0	0	1 ( 4.0)	1 ( 1.7)	1 ( 4.0)	3 ( 2.0)	
Failure to meet inclusion/exclusion criteria	0	0	0	0	1 ( 4.0)	1 ( 0.7)	
Other	0	0	0	1 ( 1.7)	0	1 ( 0.7)	
Screen failure	0	0	1 ( 4.0)	0	0	1 ( 0.7)	

#### Table S2Subject disposition (All subjects)

<sup>a</sup> Informed consent received.

Percentages were calculated based on the number of randomized subjects as the denominator.

Abbreviation: NIMP = non-investigational medicinal products.

The demographics were representative of the intended study population as defined by protocol eligibility criteria and were generally balanced between the sequences.

Overall, participants had a mean age (SD) of 66.2 (11.57) years. Seventy point eight percent of participants were male. In the overall population (excluding France where ethnic group was not collected), the vast majority of the participants were not Hispanic or Latino (86.9%).

### Summary of patient-related outcome results

## Primary endpoint: Overall palatability in the US (difference in scores)

Lokelma performed significantly better than S/CPS with a least square (LS) mean (95% confidence interval [CI]) of 25.0 (95% CI: 22.716, 27.235) vs 18.8 (95% CI: 16.569, 21.124), p < .001; however, there were no differences between Lokelma and Veltassa, p = 0.893 (more than 0.05). Veltassa was also significantly better than S/CPS with an LS mean of 24.8 (95% CI: 22.521, 27.075) vs 18.8 (95% CI: 16.569, 21.124), nominal p < .001.

### Secondary endpoints:

## Overall palatability in Canada and in EU (difference in scores)

In Canada, Lokelma performed significantly better than S/CPS with an LS mean (95% CI) of 27.2 (95% CI: 22.497, 31.988) vs 15.8 (95% CI: 11.071, 20.562), p < .001. There were no differences between Lokelma and Veltassa (p = 0.176). Veltassa seemed to also be significantly better than S/CPS with an LS mean of 24.1 (95% CI: 19.394, 28.885) vs 15.8 (95% CI: 11.071, 20.562), nominal p < .001.

In EU, Lokelma performed significantly better than S/CPS with an LS mean (95% CI) of 22.5 (95% CI: 19.916, 25.143) vs 18.7 (95% CI: 16.099, 21.325), p = 0.017. There were no differences between Lokelma and Veltassa (p = 0.660). Veltassa was not significantly better than S/CPS with an LS mean of 21.8 (95% CI: 19.220,24.446), nominal p = 0.050.

## Overall palatability scores in US, Canada, and EU

In the US, the overall palatability mean scores (SD) of Lokelma and Veltassa (24.9 [8.10] and 24.8 [9.20], respectively) were greater than S/CPS overall palatability mean score (18.9 [8.97]).

In Canada, the overall palatability mean score (SD) of Lokelma (27.3 [9.29]) was numerically superior to the mean scores of Veltassa (24.2 [11.90]) and S/CPS (16.0 [9.59]).

In EU, the overall palatability mean score (SD) of Lokelma and Veltassa (23.2 [9.43] and 22.6 [9.21], respectively) were numerically greater than S/CPS overall palatability mean score (18.6 [12.10]).

### Appeal, engagement, and empowerment of overall palatability in US, Canada, and EU

In the US, the level of appeal for overall palatability was greater for both Lokelma and Veltassa compared to S/CPS, with LS means (95% CI) of 23.2 (95% CI: 21.582, 24.827) for Lokelma, 22.9 (95% CI: 21.239, 24.513) for Veltassa, and 18.9 (95% CI: 17.221, 20.496) for S/CPS. The level of engagement for overall palatability was slightly higher for both Lokelma and Veltassa compared to S/CPS, with LS means (95% CI) of 17.5 (95% CI: 15.494, 19.439) for Lokelma, 17.7 (95% CI: 15.692, 19.664) for Veltassa, and 15.4 (95% CI: 13.391, 17.363) for S/CPS. The level of empowerment for overall palatability was slightly higher for both Lokelma and Veltassa compared to S/CPS, with LS means (95% CI) of 23.1 (95% CI: 21.215, 24.925) for Lokelma, 23.9 (95% CI: 22.006, 25.740) for Veltassa, and 22.2 (95% CI: 20.325, 24.059) for S/CPS.

In Canada, the level of appeal for overall palatability was greater for both Lokelma and Veltassa compared to S/CPS, with LS means (95% CI) of 24.6 (95% CI: 20.791, 28.408) for

Lokelma, 22.7 (95% CI: 18.875, 26.491) for Veltassa, and 16.4 (95% CI: 12.613, 20.230) for S/CPS. The level of engagement for overall palatability was slightly higher for both Lokelma and S/CPS compared to Veltassa, with LS means (95% CI) of 14.2 (95% CI: 11.100, 17.235) for Lokelma, 16.7 (95% CI: 13.666, 19.800) for S/CPS, and 12.9 (95% CI: 9.786, 15.921) for Veltassa. The level of empowerment for overall palatability was slightly higher for both Lokelma and Veltassa compared to S/CPS, with LS means (95% CI) of 26.2 (95% CI: 22.842, 29.482) for Lokelma, 25.4 (95% CI: 22.111, 28.751) for Veltassa, and 21.8 (95% CI: 18.516, 25.156) for S/CPS.

In EU, the level of appeal for overall palatability was greater for both Lokelma and Veltassa compared to S/CPS, with LS means (95% CI) of 22.2 (95% CI: 19.976, 24.384) for Lokelma, 22.0 (95% CI: 19.837, 24.244) for Veltassa, and 18.9 (95% CI: 16.684, 21.091) for S/CPS. The level of engagement for overall palatability was slightly higher for S/CPS compared to both Lokelma and Veltassa, with LS means (95% CI) of 21.2 (95% CI: 18.846, 23.546) for S/CPS, 17.6 (95% CI: 15.279, 19.980) for Lokelma, and 17.0 (95% CI: 14.660, 19.360) for Veltassa. The level of empowerment for overall palatability was slightly higher for both Lokelma and Veltassa compared to S/CPS, with LS means (95% CI) of 23.0 (95% CI: 20.673, 25.359) for Lokelma, 23.6 (95% CI: 21.277, 25.962) for Veltassa, and 20.0 (95% CI: 17.672, 22.357) for S/CPS.

# Difference in scores for feeling of appeal, engagement, and empowerment regarding overall palatability in US, Canada, and EU

In the US, Lokelma performed significantly better than S/CPS in terms of level of appeal and level of engagement (nominal p < .001 and nominal p = 0.043, respectively). There were no differences between Lokelma and Veltassa and Veltassa seemed to perform significantly better than S/CPS (nominal p < .001 for level of appeal, and nominal p = 0.026 for level of engagement). There were no differences in AdSAM level of empowerment among the 3 NIMPs.

In Canada, Lokelma seemed to be significantly superior to S/CPS in terms of level of appeal (nominal p < 0.001). There were no differences in level of appeal for overall palatability between Lokelma and Veltassa and Veltassa seemed to be significantly better than S/CPS (nominal p = 0.002). There were no significant differences in AdSAM level of engagement for overall palatability in any of the comparisons. Lokelma was significantly superior to S/CPS in terms of level of empowerment (nominal p = 0.028) and there were no differences in AdSAM level of empowerment in any of the other comparisons.

In EU, both Lokelma and Veltassa seemed to perform significantly better than S/CPS in AdSAM level of appeal for overall palatability (nominal p = 0.013). There were no differences between Lokelma and Veltassa. S/CPS seemed to perform significantly better than both Lokelma (nominal p = 0.003) and Veltassa (nominal p < .001) in terms of level of

engagement. Lokelma and Veltassa seemed to be significantly superior to S/CPS in terms of level of empowerment (nominal p = 0.018, and nominal p = 0.005, respectively); and there were no differences in AdSAM level of empowerment for overall palatability between Lokelma and Veltassa.

# Overall composite emotional strength indicator scores for overall palatability in US, Canada, and EU

In the US, emotional strength indicator (ESI) score for palatability was higher for Lokelma (446) than for Veltassa (360) or for S/CPS (441), indicating more participants expressed feelings of enthusiasm, appreciation, comfort, and acceptance of the palatability of Lokelma. Comparison of the individual attributes indicated that smell of the K+ binder created more positive, influential feelings than taste, texture, or mouthfeel. This held true for each of the 3 products.

In Canada, the composite ESI scores for palatability were higher for Veltassa (296) and Lokelma (275) than for S/CPS (241). The emotional impact of the texture and mouthfeel differentiated Lokelma and Veltassa from S/CPS the most. These factors, combined with the more pleasurable smell helped to set both Veltassa and Lokelma apart from S/CPS in terms of overall palatability.

In Europe, Lokelma's composite ESI score for palatability was lower (358) than the scores for Veltassa (406) and S/CPS (403).

## Willingness to take a K+ binder scores in US, Canada, and EU

In the US, the mean scores (SD) of Lokelma and Veltassa (6.3 [3.01] and 6.8 [2.81], respectively) were greater than S/CPS mean score (4.8 [2.76]).

In Canada, the mean scores (SD) of Lokelma and Veltassa (7.4 [3.12] and 7.1 [3.11], respectively) were greater than S/CPS mean score (4.3 [3.73]).

In EU, the mean scores (SD) of Lokelma and Veltassa (6.8 [3.14] and 7.3 [3.01], respectively) were greater than S/CPS mean score (5.2 [3.86]).

## Willingness to take a K+ binder in US, Canada, and EU

In the US, Lokelma appeared to perform significantly better than S/CPS with an LS mean (95% CI) of 6.3 (95% CI: 5.604, 7.033) vs 4.8 (95% CI: 4.099, 5.539), nominal p < .001; there were no differences between Lokelma and Veltassa (p = 0.258). Veltassa seemed to also be significantly better than S/CPS with an LS mean of 6.8 (95% CI: 6.059, 7.499) vs 4.8 (95% CI: 4.099, 5.539), nominal p < .001.

In Canada, Lokelma performed significantly better than S/CPS with an LS mean (95% CI) of 7.4 (95% CI: 5.907, 8.962) vs 4.2 (95% CI: 2.632, 5.686), nominal p < .001. There were no differences between Lokelma and Veltassa (p = 0.718). Veltassa seemed to be significantly better than S/CPS with an LS mean of 7.1 (95% CI: 5.618, 8.672) vs 4.2 (95% CI: 2.632, 5.686), nominal p < .001.

In EU, Lokelma performed significantly better than S/CPS with an LS mean (95% CI) of 6.6 (95% CI: 5.724, 7.379) vs 5.1 (95% CI: 4.233, 5.887), nominal p = 0.003. There were no differences between Lokelma and Veltassa (p = 0.396). Veltassa seemed to be significantly better than S/CPS with an LS mean of 7.0 (95% CI: 6.146, 7.800) vs 5.1 (95% CI: 4.233, 5.887), nominal p < 0.001.

# Appeal, engagement, and empowerment of willingness to take a K+ binder in US, Canada, and EU

In the US, the level of appeal for willingness to take a K+ binder was greater for both Lokelma and Veltassa compared to S/CPS, with LS means (95% CI) of 5.6 (95% CI: 5.035, 6.147) for Lokelma, 5.9 (95% CI: 5.367, 6.488) for Veltassa, and 4.5 (95% CI: 3.942, 5.064) for S/CPS. Lokelma was significantly superior to S/CPS (nominal p = 0.002); there were no differences between Lokelma and Veltassa. Veltassa seemed to significantly superior to S/CPS (nominal p < .001) for level of appeal. There were no differences in AdSAM level of engagement for willingness to take a K+ binder between Lokelma and Veltassa with odds ratio (OR) of 0.6 (95% CI: 0.280, 1.281), and between Lokelma and S/CPS with OR of 1.7 (95% CI: 0.725, 3.809). Veltassa seemed to perform significantly better than S/CPS with OR of 2.8 (95% CI: 1.115, 6.901) (nominal p = 0.029) for level of engagement. The level of empowerment for willingness to take a K+ binder was slightly higher for both Lokelma and Veltassa compared to S/CPS, with LS means (95% CI) of 5.9 (95% CI: 5.370, 6.438) for Lokelma, 6.1 (95% CI: 5.514, 6.589) for Veltassa, and 5.6 (95% CI: 5.091, 6.167) for S/CPS. There were no significant differences among the 3 NIMPs.

In Canada, the level of appeal for willingness to take a K+ binder was greater for both Lokelma and Veltassa compared to S/CPS, with LS means (95% CI) of 6.0 (95% CI: 4.649, 7.354) for Lokelma, 5.8 (95% CI: 4.471, 7.176) for Veltassa, and 4.0 (95% CI: 2.686, 5.390) for S/CPS. Lokelma was significantly superior to S/CPS (nominal p = 0.007); there were no differences between Lokelma and Veltassa, and Veltassa seemed to be significantly superior to S/CPS (nominal p = 0.013) for level of appeal. The level of engagement for willingness to take a K+ binder was slightly higher for S/CPS compared to both Lokelma and Veltassa, with LS means (95% CI) of 4.2 (95% CI: 3.182, 5.207) for S/CPS, 3.7 (95% CI: 2.687, 4.711) for Lokelma, and 3.4 (95% CI: 2.416, 4.440) for Veltassa. There were no significant differences in any of the comparisons. The level of empowerment for willingness to take a K+ binder was slightly higher for both Lokelma and Veltassa compared to S/CPS, with LS means (95% CI) of 6.7 (95% CI: 5.708, 7.674) for Lokelma, 6.0 (95% CI: 4.977, 6.942) for Veltassa, and 5.5 (95% CI: 4.559, 6.525) for S/CPS. There were no significant differences in any of the comparisons.

In EU, the level of appeal for willingness to take a K+ binder was greater for both Lokelma and Veltassa compared to S/CPS, with LS means (95% CI) of 6.0 (95% CI: 5.342, 6.673) for Lokelma, 6.0 (95% CI: 5.343, 6.674) for Veltassa, and 4.8 (95% CI: 4.166, 5.497) for S/CPS. The level of engagement for willingness to take a K+ binder was higher for S/CPS compared to both Lokelma and Veltassa, with LS means (95% CI) of 5.5 (95% CI: 4.841, 6.244) for S/CPS, 4.6 (95% CI: 3.920, 5.324) for Lokelma, and 4.4 (95% CI: 3.684, 5.087) for Veltassa. Regarding level of empowerment, Lokelma was significantly better than S/CPS with OR of 2.4 (95% CI: 1.091, 5.431) (nominal p = 0.030). There were no differences in AdSAM level of empowerment for willingness to take a K+ binder between Lokelma and Veltassa with OR of 1.1 (95% CI: 0.461, 2.478) (nominal p = 0.876), and between Veltassa and S/CPS, with OR of 2.3 (95% CI: 0.958, 5.415) (nominal p = 0.062).

# Overall composite emotional strength indicator scores for willingness to take a K+ binder in US, Canada, and EU

In the US, participant emotional response about taking the product once daily to manage K+ levels (willingness to take) indicated that there was stronger enthusiasm and receptivity to taking Lokelma once daily than for taking Veltassa or S/CPS once daily. This resulted in a higher ESI score for Lokelma. The greater enthusiasm and receptivity created by the palatability of Lokelma seemed to contribute to greater enthusiasm and receptivity to taking the product once daily. ESI scores indicated that the feelings about taking Lokelma once daily were substantially stronger than feelings about taking Veltassa once daily.

In Canada, Lokelma ranked the highest in ESI score for feelings about taking the product once daily to manage K+ levels (willingness to take). In general, the ESI scores for all 3 products were low, which was primarily a result of more passive feelings about taking a K+ binder once daily.

In EU, although Lokelma's composite ESI score for palatability was lower than the scores for Veltassa and S/CPS, Lokelma ranked the highest in the strength of influence of feelings about taking the product once daily. The ESI scores for feelings about taking the product once daily showed that the feelings about taking Lokelma were indicative of a higher level of acceptance and perceived value and could likely have a more positive influence on long-term adherence.

## Overall preference ranking in US, Canada, and EU

In the 3 countries/region, the same trend was observed with Lokelma being the most preferred product, ahead of Veltassa, and S/CPS was the least preferred product.

#### Summary of safety results

NIMPs were not fully ingested by participants but tasted only once. No safety concerns were raised during this study.

#### Conclusions

- As expected for this kind of the study, there were no safety concerns.
- In US, Canada, and EU, Lokelma met one of the primary endpoints as it was statistically significantly better than S/CPS for overall palatability.
- In US, EU, and Canada, more participants ranked Lokelma as their first choice based on overall palatability compared to Veltassa and S/CPS.
- The ESI scores for feelings about taking the product once daily showed that the feelings about taking Lokelma were indicative of a higher level of acceptance and perceived value and could likely have a more positive influence on long-term adherence.