



Clinical trial results:

A Double-Blind, Placebo Controlled Study of Pharmacodynamic Effects Of 4 Mg Nicotine Gum. A Study in Healthy Smokers Willing to Quit

Summary

| | |
|--------------------------|-------------------|
| EudraCT number | 2018-004229-10 |
| Trial protocol | PL |
| Global end of trial date | 26 September 2019 |

Results information

| | |
|--------------------------------|--------------|
| Result version number | v1 (current) |
| This version publication date | 28 May 2020 |
| First version publication date | 28 May 2020 |

Trial information

Trial identification

| | |
|-----------------------|--------------|
| Sponsor protocol code | CCSSMC000766 |
|-----------------------|--------------|

Additional study identifiers

| | |
|------------------------------------|---|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | - |
| WHO universal trial number (UTN) | - |

Notes:

Sponsors

| | |
|------------------------------|--|
| Sponsor organisation name | McNeil AB |
| Sponsor organisation address | Norrbroplatsen 2, Helsingborg, Sweden, 25109 |
| Public contact | McNeil AB, Global Regulatory Affairs, 0046 42288000, |
| Scientific contact | McNeil AB, Global Regulatory Affairs, 0046 42288000, |

Notes:

Paediatric regulatory details

| | |
|--|----|
| Is trial part of an agreed paediatric investigation plan (PIP) | No |
| Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial? | No |
| Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial? | No |

Notes:

Results analysis stage

| | |
|--|-------------------|
| Analysis stage | Final |
| Date of interim/final analysis | 26 September 2019 |
| Is this the analysis of the primary completion data? | No |
| Global end of trial reached? | Yes |
| Global end of trial date | 26 September 2019 |
| Was the trial ended prematurely? | No |

Notes:

General information about the trial

Main objective of the trial:

The primary objective of study was to evaluate the effect of 4 milligrams (mg) nicotine chewing gum on subjects' perceived relief of overall withdrawal symptoms including urges to smoke, compared to placebo over the first 2 treatment days.

Protection of trial subjects:

This study was conducted in accordance with the ethical principles that have their origin in the Declaration of Helsinki and that are consistent with Good Clinical Practices (GCP) and applicable regulatory requirements. Safety was evaluated by examining the incidence and type of adverse events, changes in clinical laboratory tests and vital signs.

Background therapy: -

Evidence for comparator: -

| | |
|---|----------------|
| Actual start date of recruitment | 20 August 2019 |
| Long term follow-up planned | No |
| Independent data monitoring committee (IDMC) involvement? | No |

Notes:

Population of trial subjects

Subjects enrolled per country

| | |
|--------------------------------------|-------------|
| Country: Number of subjects enrolled | Poland: 220 |
| Worldwide total number of subjects | 220 |
| EEA total number of subjects | 220 |

Notes:

Subjects enrolled per age group

| | |
|---|-----|
| In utero | 0 |
| Preterm newborn - gestational age < 37 wk | 0 |
| Newborns (0-27 days) | 0 |
| Infants and toddlers (28 days-23 months) | 0 |
| Children (2-11 years) | 0 |
| Adolescents (12-17 years) | 0 |
| Adults (18-64 years) | 220 |
| From 65 to 84 years | 0 |
| 85 years and over | 0 |

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

Overall, 220 subjects were randomized: 110 subjects received placebo and 110 subjects received active treatment.

Period 1

| | |
|------------------------------|--------------------------------|
| Period 1 title | Overall Study (overall period) |
| Is this the baseline period? | Yes |
| Allocation method | Randomised - controlled |
| Blinding used | Double blind |
| Roles blinded | Subject, Investigator |

Arms

| | |
|------------------------------|---------|
| Are arms mutually exclusive? | Yes |
| Arm title | Placebo |

Arm description:

Subjects received matching placebo Freshfruit E104 gum (maximum 15 gums per day) from Days 1 to 14 or until day before end of study visit.

| | |
|--|-----------------------|
| Arm type | Placebo |
| Investigational medicinal product name | Placebo |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Medicated chewing-gum |
| Routes of administration | Oromucosal use |

Dosage and administration details:

Subjects received matching placebo Freshfruit E104 gum from Days 1 to 14 or until day before end of study visit.

| | |
|------------------|-------------------------------|
| Arm title | Nicorette Freshfruit Gum 4 mg |
|------------------|-------------------------------|

Arm description:

Subjects received Nicorette Freshfruit gum 4 milligrams (mg) maximum 15 gums per day orally from Days 1 to 14 or until day before end of study visit.

| | |
|--|--------------------------|
| Arm type | Experimental |
| Investigational medicinal product name | Nicorette Freshfruit Gum |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Medicated chewing-gum |
| Routes of administration | Oromucosal use |

Dosage and administration details:

Subjects received Nicorette Freshfruit gum 4 mg from Days 1 to 14 or until day before end of study visit.

| Number of subjects in period 1 | Placebo | Nicorette Freshfruit Gum 4 mg |
|---------------------------------------|---------|-------------------------------|
| Started | 110 | 110 |
| Completed | 108 | 108 |
| Not completed | 2 | 2 |
| Consent withdrawn by subject | - | 2 |
| Lost to follow-up | 2 | - |

Baseline characteristics

Reporting groups

| | |
|-----------------------|---------|
| Reporting group title | Placebo |
|-----------------------|---------|

Reporting group description:

Subjects received matching placebo Freshfruit E104 gum (maximum 15 gums per day) from Days 1 to 14 or until day before end of study visit.

| | |
|-----------------------|-------------------------------|
| Reporting group title | Nicorette Freshfruit Gum 4 mg |
|-----------------------|-------------------------------|

Reporting group description:

Subjects received Nicorette Freshfruit gum 4 milligrams (mg) maximum 15 gums per day orally from Days 1 to 14 or until day before end of study visit.

| Reporting group values | Placebo | Nicorette Freshfruit Gum 4 mg | Total |
|---|---------|-------------------------------|-------|
| Number of subjects | 110 | 110 | 220 |
| Title for AgeCategorical Units: subjects | | | |
| Children (2-11 years) | 0 | 0 | 0 |
| Adolescents (12-17 years) | 0 | 0 | 0 |
| Adults (18-64 years) | 110 | 110 | 220 |
| From 65 to 84 years | 0 | 0 | 0 |
| 85 years and over | 0 | 0 | 0 |
| Title for AgeContinuous Units: years | | | |
| arithmetic mean | 37.4 | 36.6 | |
| standard deviation | ± 10.95 | ± 11.54 | - |
| Title for Gender Units: subjects | | | |
| Female | 60 | 66 | 126 |
| Male | 50 | 44 | 94 |

End points

End points reporting groups

| | |
|---|-------------------------------|
| Reporting group title | Placebo |
| Reporting group description: Subjects received matching placebo Freshfruit E104 gum (maximum 15 gums per day) from Days 1 to 14 or until day before end of study visit. | |
| Reporting group title | Nicorette Freshfruit Gum 4 mg |
| Reporting group description: Subjects received Nicorette Freshfruit gum 4 milligrams (mg) maximum 15 gums per day orally from Days 1 to 14 or until day before end of study visit. | |

Primary: Mean of Daily Self-assessed Visual Analog Scale (VAS) Ratings of Relief of Overall Withdrawal Symptoms Over Days 1 and 2

| | |
|---|--|
| End point title | Mean of Daily Self-assessed Visual Analog Scale (VAS) Ratings of Relief of Overall Withdrawal Symptoms Over Days 1 and 2 |
| End point description: VAS is self-assessed tool to record the treatment effects on overall relief of withdrawal symptoms. VAS scale ranges from 0 to 100 millimetre (mm). 0 indicated no relief of withdrawal symptoms and 100 indicated complete relief of withdrawal symptoms. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint. | |
| End point type | Primary |
| End point timeframe: Days 1 and 2 | |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|----------------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 110 | 109 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 26.64 (\pm 1.971) | 32.53 (\pm 1.980) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 219 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.036 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 5.89 |

| | |
|---------------------|---------|
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 0.38 |
| upper limit | 11.39 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Overall Withdrawal Symptoms Over Days 3 to 7

| | |
|-----------------|---|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Overall Withdrawal Symptoms Over Days 3 to 7 |
|-----------------|---|

End point description:

VAS is self-assessed tool to record the treatment effects on overall relief of withdrawal symptoms. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of withdrawal symptoms and 100 indicated complete relief of withdrawal symptoms. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Days 3 to 7

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|----------------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 107 | 110 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 33.08 (\pm 2.107) | 38.91 (\pm 2.078) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 217 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.05 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 5.83 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 0 |
| upper limit | 11.66 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Overall Withdrawal Symptoms Over Days 8 to 14

| | |
|-----------------|--|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Overall Withdrawal Symptoms Over Days 8 to 14 |
|-----------------|--|

End point description:

VAS is self-assessed tool to record the treatment effects on overall relief of withdrawal symptoms. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of withdrawal symptoms and 100 indicated complete relief of withdrawal symptoms. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Days 8 to 14.

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|----------------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 108 | 106 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 37.38 (\pm 2.483) | 46.71 (\pm 2.506) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 214 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.009 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 9.32 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 2.37 |
| upper limit | 16.28 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Urge to Smoke Over Days 1 and 2

| | |
|-----------------|--|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Urge to |
|-----------------|--|

End point description:

VAS is self-assessed tool to record the treatment effects on relief of urge to smoke. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of urge to smoke and 100 indicated complete relief of urge to smoke. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Days 1 and 2

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|-------------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 110 | 108 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 25.93 (\pm 1.965) | 33.06 (\pm 1.983) | | |

Statistical analyses

| Statistical analysis title | Statistical analysis 1 |
|---|---|
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 218 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.011 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 7.14 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 1.63 |
| upper limit | 12.6 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Urge to Smoke Over Days 3 to 7

| | |
|-----------------|---|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Urge to Smoke Over Days 3 to 7 |
|-----------------|---|

End point description:

VAS is self-assessed tool to record the treatment effects on relief of urge to smoke. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of urge to smoke and 100 indicated complete relief of urge to smoke. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Day 3 to 7

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|-------------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 103 | 108 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 31.88 (\pm 2.097) | 39.73 (\pm 2.048) | | |

Statistical analyses

| Statistical analysis title | statistical analysis 1 |
|--|---|
| Statistical analysis description: | |
| Database auto-calculates total number of subjects erroneously, analyzed number of subjects were 103. | |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 211 |
| Analysis specification | Pre-specified |
| Analysis type | other |
| P-value | = 0.008 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 7.85 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 2.07 |
| upper limit | 13.6 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Urge to Smoke Over Days 8 to 14

| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Urge to Smoke Over Days 8 to 14 |
|--|--|
| End point description: | |
| VAS is self-assessed tool to record the treatment effects on relief of urge to smoke. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of urge to smoke and 100 indicated complete relief of urge to smoke. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint. | |
| End point type | Secondary |
| End point timeframe: | |
| Days 8 to 14 | |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|-------------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 96 | 92 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 35.79 (\pm 2.511) | 43.13 (\pm 2.565) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 188 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.042 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 7.34 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 0.26 |
| upper limit | 14.43 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of depressed mood Over Days 1 and 2

| | |
|------------------------|---|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of depressed mood Over Days 1 and 2 |
| End point description: | VAS is self-assessed tool to record the treatment effects on relief of depressed mood. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of depressed mood and 100 indicated complete relief of depressed mood. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint. |
| End point type | Secondary |
| End point timeframe: | Days 1 and 2 |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|--------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 31 | 33 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 23.90 (± 3.286) | 19.24 (± 3.185) | | |

Statistical analyses

| Statistical analysis title | Statistical analysis 1 |
|---|---|
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 64 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.312 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | -4.66 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -13.81 |
| upper limit | 4.49 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of depressed mood Over Days 3 to 7

| | |
|------------------------|---|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of depressed mood Over Days 3 to 7 |
| End point description: | VAS is self-assessed tool to record the treatment effects on relief of depressed mood. VAS scale ranges from Zero to 100 mm. Zero indicated no relief of depressed mood and 100 indicated complete relief of depressed mood. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint. |
| End point type | Secondary |
| End point timeframe: | Days 3 to 7 |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|--------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 6 | 10 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 21.86 (± 7.288) | 30.97 (± 5.646) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 16 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.34 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 9.11 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -10.66 |
| upper limit | 28.89 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of depressed mood Over Days 8 to 14

| | |
|------------------------|---|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of depressed mood Over Days 8 to 14 |
| End point description: | VAS is self-assessed tool to record the treatment effects on relief of depressed mood. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of depressed mood and 100 indicated complete relief of depressed mood. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint. |
| End point type | Secondary |
| End point timeframe: | Days 8 to 14 |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|------------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 3 | 6 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 29.85 (± 13.165) | 37.83 (± 9.309) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 9 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.636 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 7.98 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -30.15 |
| upper limit | 46.11 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of irritability Over Days 1 and 2

| | |
|------------------------|---|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of irritability Over Days 1 and 2 |
| End point description: | VAS is self-assessed tool to record the treatment effects on relief of irritability. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of irritability and 100 indicated complete relief of irritability. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint. |
| End point type | Secondary |
| End point timeframe: | Days 1 and 2 |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|----------------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 48 | 59 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 24.79 (\pm 3.026) | 27.01 (\pm 2.730) | | |

Statistical analyses

| | |
|-----------------------------------|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |

| | |
|---|---------------------------|
| Number of subjects included in analysis | 107 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.588 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 0.588 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -5.86 |
| upper limit | 10.3 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of irritability Over Days 3 to 7

| | |
|-----------------|--|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of irritability Over Days 3 to 7 |
|-----------------|--|

End point description:

VAS is self-assessed tool to record the treatment effects on relief of irritability. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of irritability and 100 indicated complete relief of irritability. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Days 3 to 7

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|----------------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 16 | 21 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 28.90 (\pm 5.058) | 32.88 (\pm 4.415) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 37 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.558 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 3.98 |

| | |
|---------------------|---------|
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -9.66 |
| upper limit | 17.61 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of irritability Over Days 8 to 14

| | |
|--|---|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of irritability Over Days 8 to 14 |
| End point description: | |
| VAS is self-assessed tool to record the treatment effects on relief of irritability. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of irritability and 100 indicated complete relief of irritability. Here 'N' signifies number of subjects who were evaluable for this endpoint. | |
| End point type | Secondary |
| End point timeframe: | |
| Days 8 to 14 | |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|----------------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 8 | 11 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 51.56 (\pm 6.678) | 40.66 (\pm 5.695) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 19 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.231 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | -10.9 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -29.42 |
| upper limit | 7.62 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Frustration Over Days 1 and 2

| | |
|-----------------|--|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Frustration Over Days 1 and 2 |
|-----------------|--|

End point description:

VAS is self-assessed tool to record the treatment effects on relief of frustration. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of frustration and 100 indicated complete relief of frustration. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Days 1 and 2

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|----------------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 31 | 47 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 19.79 (\pm 3.761) | 26.48 (\pm 3.054) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 78 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.171 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 6.69 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -2.96 |
| upper limit | 16.34 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Frustration Over Days 3 to 7

| | |
|-----------------|---|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Frustration Over Days 3 to 7 |
|-----------------|---|

End point description:

VAS is self-assessed tool to record the treatment effects on relief of frustration. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of frustration and 100 indicated complete relief of frustration. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint.

signifies number of subjects who were evaluable for this endpoint.

| | |
|----------------------|-----------|
| End point type | Secondary |
| End point timeframe: | |
| Days 3 to 7 | |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|-------------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 8 | 12 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 27.13 (\pm 7.033) | 37.52 (\pm 5.742) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 20 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.268 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 0.268 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -8.69 |
| upper limit | 29.46 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Frustration Over Days 8 to 14

| | |
|-----------------|--|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Frustration Over Days 8 to 14 |
|-----------------|--|

End point description:

VAS is self-assessed tool to record the treatment effects on relief of frustration. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of frustration and 100 indicated complete relief of frustration. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint.

| | |
|----------------------|-----------|
| End point type | Secondary |
| End point timeframe: | |
| Days 8 to 14 | |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|--------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 5 | 8 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 35.79 (± 9.552) | 46.07 (± 7.551) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 13 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.416 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 0.416 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -16.52 |
| upper limit | 37.08 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Restlessness Over Days 1 to 2

| | |
|------------------------|---|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Restlessness Over Days 1 to 2 |
| End point description: | VAS is self-assessed tool to record the treatment effects on relief of restlessness. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of restlessness and 100 indicated complete relief of restlessness. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint. |
| End point type | Secondary |
| End point timeframe: | Days 1 and 2 |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|--------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 53 | 56 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 23.25 (± 2.807) | 26.22 (± 2.731) | | |

Statistical analyses

| Statistical analysis title | Statistical analysis 1 |
|---|---|
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 109 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.45 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 2.97 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -4.8 |
| upper limit | 10.73 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Restlessness Over Days 3 to 7

| | |
|------------------------|--|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Restlessness Over Days 3 to 7 |
| End point description: | VAS is self-assessed tool to record the treatment effects on relief of restlessness. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of restlessness and 100 indicated complete relief of restlessness. Here 'N' signifies number of subjects who were evaluable for this endpoint. |
| End point type | Secondary |
| End point timeframe: | Days 3 to 7 |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|--------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 22 | 27 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 35.05 (± 4.426) | 35.12 (± 3.995) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 49 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.992 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 0.06 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -11.93 |
| upper limit | 12.06 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Restlessness Over Days 8 to 14

| | |
|------------------------|--|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Restlessness Over Days 8 to 14 |
| End point description: | VAS is self-assessed tool to record the treatment effects on relief of restlessness. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of restlessness and 100 indicated complete relief of restlessness. Here 'N' signifies number of subjects who were evaluable for this endpoint. |
| End point type | Secondary |
| End point timeframe: | Days 8 to 14 |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|-----------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 15 | 18 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 49.53 (± 5.312) | 40.65 (± 4.849) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 33 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.226 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 0.226 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -23.55 |
| upper limit | 5.79 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Increased Appetite Over Days 1 to 2

| | |
|------------------------|--|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Increased Appetite Over Days 1 to 2 |
| End point description: | VAS is self-assessed tool to record the treatment effects on relief of increased appetite. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of increased appetite and 100 indicated complete relief of increased appetite. Here 'N' signifies number of subjects who were evaluable for this endpoint. |
| End point type | Secondary |
| End point timeframe: | Days 1 and 2 |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|-----------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 35 | 46 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 20.13 (± 3.557) | 27.22 (± 3.103) | | |

Statistical analyses

| | |
|-----------------------------------|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |

| | |
|---|---------------------------|
| Number of subjects included in analysis | 81 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.137 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 7.09 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -2.31 |
| upper limit | 16.48 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief Increased Appetite Over Days 3 to 7

| | |
|-----------------|---|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief Increased Appetite Over Days 3 to 7 |
|-----------------|---|

End point description:

VAS is self-assessed tool to record the treatment effects on relief increased appetite. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of increased appetite and 100 indicated complete relief of increased appetite. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Days 3 to 7

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|-----------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 15 | 15 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 35.06 (± 5.784) | 35.86 (± 5.784) | | |

Statistical analyses

| | |
|----------------------------|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |

| | |
|---|---------------------------|
| Number of subjects included in analysis | 30 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.923 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 0.8 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -15.96 |
| upper limit | 17.56 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief Increased Appetite Over Days 8 to 14

| | |
|-----------------|--|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief Increased Appetite Over Days 8 to 14 |
|-----------------|--|

End point description:

VAS is self-assessed tool to record the treatment effects on relief increased appetite. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of increased appetite and 100 indicated complete relief of increased appetite. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Days 8 to 14

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|-----------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 7 | 11 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 41.02 (± 8.215) | 40.02 (± 6.553) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 18 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.926 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | -0.99 |

| | |
|---------------------|---------|
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -23.27 |
| upper limit | 21.28 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Stress Over Days 1 to 2

| | |
|---|--|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Stress Over Days 1 to 2 |
| End point description: | |
| VAS is self-assessed tool to record the treatment effects of relief of stress. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of stress and 100 indicated complete relief of stress. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint. | |
| End point type | Secondary |
| End point timeframe: | |
| Days 1 and 2 | |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|----------------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 49 | 50 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 23.17 (\pm 2.656) | 20.48 (\pm 2.630) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 99 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.473 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | -2.69 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -10.11 |
| upper limit | 4.72 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Stress Over Days 3 to 7

| | |
|------------------------|---|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Stress Over Days 3 to 7 |
| End point description: | VAS is self-assessed tool to record the treatment effects of relief of stress. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of stress and 100 indicated complete relief of stress. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint. |
| End point type | Secondary |
| End point timeframe: | Days 3 to 7 |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|----------------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 10 | 22 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 38.47 (\pm 6.625) | 31.83 (\pm 4.467) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 32 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.413 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | -6.63 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -22.95 |
| upper limit | 9.69 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Stress Over Days 8 to 14

| | |
|-----------------|---|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Stress Over Days 8 to 14 |
|-----------------|---|

End point description:

VAS is self-assessed tool to record the treatment effects of relief of stress. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of stress and 100 indicated complete relief of stress. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint.

End point type Secondary

End point timeframe:

Days 8 to 14

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|-------------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 8 | 11 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 38.99 (\pm 9.275) | 45.87 (\pm 7.910) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 19 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.58 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 6.88 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -18.84 |
| upper limit | 32.6 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Difficulty Concentrating Over Days 1 to 2

End point title Mean of Daily Self-assessed VAS Ratings of Relief of Difficulty Concentrating Over Days 1 to 2

End point description:

VAS is self-assessed tool to record the treatment effects on relief of difficulty concentrating. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of difficulty concentrating and 100 indicated complete relief of difficulty concentrating. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint.

End point type Secondary

End point timeframe:

Days 1 and 2

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|-------------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 26 | 33 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 23.25 (\pm 3.509) | 22.74 (\pm 3.114) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 59 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.914 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | -0.51 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -9.9 |
| upper limit | 8.89 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Difficulty Concentrating Over Days 3 to 7

| | |
|------------------------|---|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Difficulty Concentrating Over Days 3 to 7 |
| End point description: | VAS is self-assessed tool to record the treatment effects on relief of difficulty concentrating. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of difficulty concentrating and 100 indicated complete relief of difficulty concentrating. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint. |
| End point type | Secondary |
| End point timeframe: | Days 3 to 7 |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|--------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 4 | 10 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 31.95 (± 9.275) | 33.87 (± 5.866) | | |

Statistical analyses

| Statistical analysis title | Statistical analysis 1 |
|---|---|
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 14 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.864 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | 1.92 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -22 |
| upper limit | 25.83 |

Secondary: Mean of Daily Self-assessed VAS Ratings of Relief of Difficulty Concentrating Over Days 8 to 14

| | |
|------------------------|---|
| End point title | Mean of Daily Self-assessed VAS Ratings of Relief of Difficulty Concentrating Over Days 8 to 14 |
| End point description: | VAS is self-assessed tool to record the treatment effects on relief of difficulty concentrating. VAS scale ranges from 0 to 100 mm. 0 indicated no relief of difficulty concentrating and 100 indicated complete relief of difficulty concentrating. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint. |
| End point type | Secondary |
| End point timeframe: | Days 8 to 14 |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-------------------------------------|--------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 4 | 5 | | |
| Units: unit on scale | | | | |
| least squares mean (standard error) | 49.76 (± 9.333) | 41.86 (± 8.348) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 9 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.548 |
| Method | ANOVA |
| Parameter estimate | Estimated mean difference |
| Point estimate | -7.9 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -37.51 |
| upper limit | 21.71 |

Secondary: Perceived Change in Self-efficacy in Quitting Smoking at Week 1 Visit

| | |
|------------------------|---|
| End point title | Perceived Change in Self-efficacy in Quitting Smoking at Week 1 Visit |
| End point description: | Subjects' perceived change in self-efficacy in quitting smoking was recorded. Self-efficacy in quitting smoking was recorded on a 7-grade scale, where 1 indicated much less confident; 7 indicated much more confident. Missing data were imputed with 'Less confident (2)' on a 7-grade scale. Full analysis set included all randomized subjects who received at least 1 dose of study drug. |
| End point type | Secondary |
| End point timeframe: | Week 1 |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|--------------------------------------|-----------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 110 | 110 | | |
| Units: unit on scale | | | | |
| arithmetic mean (standard deviation) | 4.7 (± 1.15) | 5.0 (± 1.20) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 220 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.051 |
| Method | Wilcoxon (Mann-Whitney) |

Secondary: Self- assessed Ratings of Change in Willpower to Quit Smoking After 2 Days

| | |
|-----------------|--|
| End point title | Self- assessed Ratings of Change in Willpower to Quit Smoking After 2 Days |
|-----------------|--|

End point description:

Subjects' self- assessed ratings of change in willpower to quit smoking was recorded. Self- assessed ratings in quitting smoking was recorded on a 7-grade scale, where 1 indicated much weaker willpower; 7 indicated much stronger willpower. Missing data were imputed with 'Weaker (2)' on 7-grade categorical scale for subjects who discontinued study prematurely or imputed using last observation carried forward for subjects who completed the study. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Day 2

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|--------------------------------------|-----------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 110 | 107 | | |
| Units: unit on scale | | | | |
| arithmetic mean (standard deviation) | 4.4 (± 1.14) | 4.5 (± 1.14) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 217 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.452 |
| Method | Wilcoxon (Mann-Whitney) |

Secondary: Self- assessed Ratings of Change in Willpower to Quit Smoking After 7 Days

| | |
|-----------------|--|
| End point title | Self- assessed Ratings of Change in Willpower to Quit Smoking After 7 Days |
|-----------------|--|

End point description:

Subjects' self- assessed ratings of change in willpower to quit smoking was recorded. Self- assessed ratings in quitting smoking was recorded on a 7-grade scale, where 1 indicated much weaker willpower; 7 indicated much stronger willpower. Missing data were imputed with 'Weaker (2)' on 7-grade categorical scale for subjects who discontinued study prematurely or imputed using last observation carried forward for subjects who completed the study. Full analysis set included all randomized subjects who received at least 1 dose of study drug.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Day 7

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|--------------------------------------|-----------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 110 | 110 | | |
| Units: unit on scale | | | | |
| arithmetic mean (standard deviation) | 4.8 (± 1.11) | 5.1 (± 1.05) | | |

Statistical analyses

| Statistical analysis title | Statistical analysis 1 |
|---|---|
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 220 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.05 |
| Method | Wilcoxon (Mann-Whitney) |

Secondary: Self- assessed Ratings of Change in Willpower to Quit Smoking After 14 Days

| | |
|-----------------|---|
| End point title | Self- assessed Ratings of Change in Willpower to Quit Smoking After 14 Days |
|-----------------|---|

End point description:

Subjects' self- assessed ratings of change in willpower to quit smoking was recorded. Self- assessed ratings in quitting smoking was recorded on a 7-grade scale, where 1 indicated much weaker willpower; 7 indicated much stronger willpower. Missing data were imputed with 'Weaker (2)' on 7-grade categorical scale for subjects who discontinued study prematurely or imputed using last observation carried forward for subjects who completed the study. Full analysis set included all randomized subjects who received at least 1 dose of study drug.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Day 14

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|--------------------------------------|-------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 110 | 110 | | |
| Units: unit on scale | | | | |
| arithmetic mean (standard deviation) | 4.8 (\pm 1.32) | 5.3 (\pm 1.29) | | |

Statistical analyses

| Statistical analysis title | Statistical analysis 1 |
|---|---|
| Comparison groups | Placebo v Nicorette Freshfruit Gum 4 mg |
| Number of subjects included in analysis | 220 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.008 |
| Method | Wilcoxon (Mann-Whitney) |

Secondary: Self- assessed Ratings of Change in Willpower to Resist a Cigarette After 2 Days

| | |
|-----------------|--|
| End point title | Self- assessed Ratings of Change in Willpower to Resist a Cigarette After 2 Days |
|-----------------|--|

End point description:

Subjects' self- assessed ratings of change in willpower to resist a cigarette was recorded. Self- assessed ratings in quitting smoking was recorded on a 7-grade scale, where 1 indicated much weaker willpower; 7 indicated much stronger willpower. Missing data were imputed with 'Weaker (2)' on 7-grade categorical scale for subjects who discontinued study prematurely or imputed using last observation carried forward for subjects who completed the study. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'N' signifies number of subjects who were evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Day 2

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|--------------------------------------|-------------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 110 | 107 | | |
| Units: unit on scale | | | | |
| arithmetic mean (standard deviation) | 4.4 (\pm 1.18) | 4.6 (\pm 1.24) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 217 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.213 |
| Method | Wilcoxon (Mann-Whitney) |

Secondary: Self- assessed Ratings of Change in Willpower to Resist a Cigarette After 7 Days

| | |
|-----------------|--|
| End point title | Self- assessed Ratings of Change in Willpower to Resist a Cigarette After 7 Days |
|-----------------|--|

End point description:

Subjects' self- assessed ratings of change in willpower to resist a cigarette was recorded. Self- assessed ratings in quitting smoking was recorded on a 7-grade scale, where 1 indicated much weaker willpower; 7 indicated much stronger willpower. Full analysis set included all randomized subjects who received at least 1 dose of study drug.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Day 7

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|--------------------------------------|-----------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 110 | 110 | | |
| Units: unit on scale | | | | |
| arithmetic mean (standard deviation) | 4.7 (± 1.11) | 5.0 (± 1.21) | | |

Statistical analyses

| | |
|-----------------------------------|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |

| | |
|---|-------------------------|
| Number of subjects included in analysis | 220 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.045 |
| Method | Wilcoxon (Mann-Whitney) |

Secondary: Self- assessed Ratings of Change in Willpower to Resist a Cigarette After 14 Days

| | |
|-----------------|---|
| End point title | Self- assessed Ratings of Change in Willpower to Resist a Cigarette After 14 Days |
|-----------------|---|

End point description:

Subjects' self- assessed ratings of change in willpower to resist a cigarette was recorded. Self- assessed ratings in quitting smoking was recorded on a 7-grade scale, where 1 indicated much weaker willpower; 7 indicated much stronger willpower. Missing data were imputed with 'Weaker (2)' on 7-grade categorical scale for subjects who discontinued study prematurely or imputed using last observation carried forward for subjects who completed the study. Full analysis set included all randomized subjects who received at least 1 dose of study drug.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Day 14

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|--------------------------------------|-----------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 110 | 110 | | |
| Units: unit on scale | | | | |
| arithmetic mean (standard deviation) | 4.7 (± 1.29) | 5.2 (± 1.25) | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 220 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.003 |
| Method | Wilcoxon (Mann-Whitney) |

Secondary: Number of Subjects with Self-reported and CO-verified Smoking Abstinence at Week 1 and at the End of Study

| | |
|-----------------|--|
| End point title | Number of Subjects with Self-reported and CO-verified Smoking Abstinence at Week 1 and at the End of Study |
|-----------------|--|

End point description:

Number of subjects with self-reported and CO-verified smoking abstinence at Week 1 and at the end of study visits was reported. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'n' signifies number of subjects analyzed for specific arm.

| | |
|----------------------------------|-----------|
| End point type | Secondary |
| End point timeframe: | |
| Week 1 and Week 2 (end of study) | |

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|-----------------------------|-----------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 110 | 110 | | |
| Units: Subjects | | | | |
| Week 1 (n=109, 108) | 1 | 1 | | |
| End of study (n=108, 108) | 3 | 2 | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Statistical analysis week 1 |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 220 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.369 |
| Method | ANOVA |
| Parameter estimate | Estimated Rate mean difference |
| Point estimate | -1.86 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -5.44 |
| upper limit | 1.72 |

| | |
|---|---|
| Statistical analysis title | Statistical analysis (end of study) |
| Comparison groups | Nicorette Freshfruit Gum 4 mg v Placebo |
| Number of subjects included in analysis | 220 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | > 0.999 |
| Method | ANOVA |
| Parameter estimate | Estimated Rate mean difference |
| Point estimate | -0.93 |

| | |
|---------------------|---------|
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -4.04 |
| upper limit | 2.19 |

Secondary: Mean Daily Number of Gums Used by study Subjects on Days 1 to 14

| | |
|-----------------|--|
| End point title | Mean Daily Number of Gums Used by study Subjects on Days 1 to 14 |
|-----------------|--|

End point description:

Mean daily number of gums used by study subjects on Days 1 to 14 were reported. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'n' signifies number of subjects analyzed for specific arm.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Days 1 to 14

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|----------------------------------|-----------------|-------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 110 | 110 | | |
| Units: number of gums | | | | |
| arithmetic mean (standard error) | | | | |
| Day 1 (n=110, 109) | 8.5 (± 3.50) | 7.2 (± 3.10) | | |
| Day 2 (n=110, 107) | 9.3 (± 3.43) | 8.3 (± 3.61) | | |
| Day 3 (n=109, 108) | 9.1 (± 3.16) | 8.6 (± 3.61) | | |
| Day 4 (n=108, 106) | 9.3 (± 3.63) | 8.6 (± 3.62) | | |
| Day 5 (n=110, 105) | 9.3 (± 3.74) | 8.2 (± 3.74) | | |
| Day 6 (n=109, 109) | 9.3 (± 3.68) | 8.7 (± 3.76) | | |
| Day 7 (n=109, 109) | 9.0 (± 3.67) | 8.5 (± 3.41) | | |
| Day 8 (n=104, 107) | 9.9 (± 3.69) | 8.9 (± 3.70) | | |
| Day 9 (n=105, 105) | 9.7 (± 3.55) | 9.1 (± 3.74) | | |
| Day 10 (n=107, 106) | 9.7 (± 3.65) | 8.8 (± 3.78) | | |
| Day 11 (n=106, 106) | 9.4 (± 3.98) | 8.7 (± 3.84) | | |
| Day 12 (n=107, 106) | 9.7 (± 3.70) | 8.3 (± 3.84) | | |
| Day 13 (n=108, 108) | 10.0 (± 3.59) | 8.5 (± 3.67) | | |
| Day 14 (n=108, 107) | 9.5 (± 3.92) | 8.5 (± 3.78) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Mean Daily Number of Cigarettes Smoked by Study Subjects on Days 1

to 14

| | |
|-----------------|--|
| End point title | Mean Daily Number of Cigarettes Smoked by Study Subjects on Days 1 to 14 |
|-----------------|--|

End point description:

Mean daily number of cigarettes smoked by study subjects on Days 1 to 14 were reported. Full analysis set included all randomized subjects who received at least 1 dose of study drug. Here 'n' signifies number of subjects analyzed for specific arm.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Days 1 to 14

| End point values | Placebo | Nicorette Freshfruit Gum 4 mg | | |
|----------------------------------|-----------------|-------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 110 | 110 | | |
| Units: number of cigarettes | | | | |
| arithmetic mean (standard error) | | | | |
| Day 1 (n=110, 109) | 14.7 (± 7.22) | 13.0 (± 8.45) | | |
| Day 2 (n=110, 107) | 13.7 (± 7.79) | 11.2 (± 7.93) | | |
| Day 3 (n=109, 108) | 12.9 (± 7.46) | 10.5 (± 7.21) | | |
| Day 4 (n=108, 106) | 12.3 (± 7.90) | 10.1 (± 7.56) | | |
| Day 5 (n=110, 105) | 11.8 (± 7.11) | 10.2 (± 7.59) | | |
| Day 6 (n=109, 109) | 11.3 (± 7.39) | 9.7 (± 7.39) | | |
| Day 7 (n=109, 109) | 11.4 (± 7.62) | 8.7 (± 6.57) | | |
| Day 8 (n=104, 107) | 11.2 (± 7.79) | 9.1 (± 7.25) | | |
| Day 9 (n=105, 105) | 10.8 (± 7.44) | 8.5 (± 7.07) | | |
| Day 10 (n=107, 106) | 10.6 (± 7.25) | 8.0 (± 7.37) | | |
| Day 11 (n=106, 106) | 10.7 (± 8.12) | 7.9 (± 6.98) | | |
| Day 12 (n=107, 106) | 10.3 (± 7.63) | 8.2 (± 7.02) | | |
| Day 13 (n=108, 108) | 10.4 (± 7.50) | 7.9 (± 7.33) | | |
| Day 14 (n=108, 107) | 10.4 (± 7.83) | 7.8 (± 7.17) | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Up to 5 weeks

| | |
|-----------------|------------|
| Assessment type | Systematic |
|-----------------|------------|

Dictionary used

| | |
|-----------------|--------|
| Dictionary name | MedDRA |
|-----------------|--------|

| | |
|--------------------|------|
| Dictionary version | 21.0 |
|--------------------|------|

Reporting groups

| | |
|-----------------------|---------|
| Reporting group title | Placebo |
|-----------------------|---------|

Reporting group description:

Subjects received matching placebo Freshfruit E104 gum maximum 15 gums per day from Days 1 to 14 or until day before end of study visit.

| | |
|-----------------------|-------------------------------|
| Reporting group title | Nicorette Freshfruit Gum 4 mg |
|-----------------------|-------------------------------|

Reporting group description:

Subjects received Nicorette Freshfruit gum 4 milligram (mg) maximum 15 gums per day orally from Days 1 to 14 or until day before end of study visit.

| Serious adverse events | Placebo | Nicorette Freshfruit Gum 4 mg | |
|---|-----------------|-------------------------------|--|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 0 / 110 (0.00%) | 0 / 110 (0.00%) | |
| number of deaths (all causes) | 0 | 0 | |
| number of deaths resulting from adverse events | | | |

Frequency threshold for reporting non-serious adverse events: 5 %

| Non-serious adverse events | Placebo | Nicorette Freshfruit Gum 4 mg | |
|---|------------------|-------------------------------|--|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 10 / 110 (9.09%) | 42 / 110 (38.18%) | |
| Nervous system disorders | | | |
| Dysgeusia | | | |
| subjects affected / exposed | 2 / 110 (1.82%) | 9 / 110 (8.18%) | |
| occurrences (all) | 2 | 9 | |
| Headache | | | |
| subjects affected / exposed | 4 / 110 (3.64%) | 6 / 110 (5.45%) | |
| occurrences (all) | 5 | 6 | |
| Gastrointestinal disorders | | | |

| | | | |
|--|----------------------|-------------------------|--|
| Nausea subjects affected / exposed occurrences (all) | 0 / 110 (0.00%) 0 | 18 / 110 (16.36%) 18 | |
| Respiratory, thoracic and mediastinal disorders | | | |
| Oropharyngeal Pain subjects affected / exposed occurrences (all) | 0 / 110 (0.00%) 0 | 6 / 110 (5.45%) 6 | |
| Throat Irritation subjects affected / exposed occurrences (all) | 5 / 110 (4.55%) 5 | 16 / 110 (14.55%) 16 | |

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported