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# The effectiveness of Aviron Rapid© to improve symptoms of upper respiratory tract infections

**Submission date**
22/03/2022

**Recruitment status**
No longer recruiting

**Registration date**
29/03/2022

**Overall study status**
Completed

**Last Edited**
07/06/2023

**Condition category**
Respiratory

[_] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

## Plain English summary of protocol

Background and study aims
Respiratory tract infections (RTIs) are infections of parts of the body involved in breathing, such as the sinuses, throat, airways, or lungs that affect billions of people annually worldwide. This results in a considerable burden on society in terms of both health and financial matters. Such condition affects individuals across all age groups, with children being more susceptible than adults. Although there are several over-the-counter products available to mitigate the symptoms of RTIs, to date there are very few safe and effective treatment options. The main aim of the study is to evaluate how well Aviron Rapid© (containing andrographolide (10 mg), proprietary spirulina extract (100 mg) and humic acid racemic mixture (250 mg) works in treating AURTI in patients of all age groups. In fact, we will analyse its efficacy in 3 distinct groups of people: adults (aged 18 – 60), adolescents (aged 13 – 17), and children (aged 5 – 12). This will be assessed in terms of the ability of Aviron Rapid© to decrease the duration of the illness, reduces fever without any antipyretic intake, and improves the symptoms associated with AURTI such as nasal congestion, cough, sore throat, headache, fatigue, sleep disturbances

Who can participate?
Subjects falling within the three age brackets (5-12; 13-17; and 18-60 years) presenting to a General Practitioner's (GP) clinic with an axillary temperature of >37°C, and at least with one of the following symptoms that started within the 24 hours preceding the GP visit: nasal congestion, cough, sore throat, headache, fatigue, sleep disturbances will be able to participate in this trial. Healthy volunteers will not be included in this trial. Both males and females can participate in this trial.

What does the study involve?
The GP will initially take the patients' history all subjects who meet all the inclusion criteria and have no exclusion criteria and perform a full thorough physical examination. The participants will then be divided into two groups: the treatment group will be given Aviron Rapid© for 5 (Study 1 and Study 2) or 7 (Study 3) days; whilst the control group will be given a dummy for 5 (Study 1 and Study 2) or 7 (Study 3) days. This trial will be double-blinded, which means that neither the doctor, nor the patient will know whether they are receiving the treatment or the placebo. The only measurement to be taken by the GP during the initial visit will be that of the subjects' temperature. No further investigations will be conducted at this point.

The patient or the patient's parent/guardian will then receive a diary to record a set of data twice a day, in the morning and in the evening for 5 (Study 1 and Study 2) or 7 (Study 3) days. The data will include the: axillary temperature, whether the participants are taking antipyretics, and the symptoms (nasal congestion, cough, sore throat, headache, fatigue, sleep disturbances) severity evaluated by Visual Analogue Scale. This scale is based on allocating a value to the severity of each symptom mentioned before as per the following scale: 0 = Lack of symptoms; 2 = Very mild symptoms; 4 = Mild symptoms; 6 = Moderate symptoms; 8 = Severe symptoms, 10 = Very severe. The participants will also be instructed to record any side effects in their diary during the duration of the follow-up period.
At the end of the follow-up period (5 (Study 1 and Study 2) or 7 (Study 3) days), the participants will return to the GP office. The doctor will again re-examine the patient and check the data entered by each subject in their diary.

What are the possible benefits and risks of participating?
The possible benefits of participating in this trial will be reduced illness duration and rapid symptoms improvement. Since this drug is already an approved food supplement, there are no health risks in taking this drug.

Where is the study run from?
Neopharm Bulgaria Ltd

When is the study starting and how long is it expected to run for?
June 2019 to March 2020

Who is funding the study?
Neopharm Bulgaria Ltd

Who is the main contact?
Margarita Futekova, m.futekova@neopharm.bg

# Contact information

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Scientific

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# Additional identifiers

**Clinical Trials Information System (CTIS)**
Nil known

**Protocol serial number**
R-AVI-19-CT-004

# Study information

**Scientific Title**
Aviron Rapid© vs placebo in the management of acute upper respiratory tract infections

**Acronym**
ARVP-AURTI

**Study objectives**
With regards to treatment of acute respiratory tract infection, Aviron Rapid© reduces duration for illness recovery, decreases antipyretic intake, and ameliorates secondary symptoms when compared to a placebo, and does not increase any side effects.

**Ethics approval required**
Old ethics approval format

**Ethics approval(s)**
Approved 30/11/2019, First Children Consultancy Clinic, LTD (25B, Chavdar Mutafov Str, Sofia, 1700, Bulgaria; +359 876 450560; tsvetomira.georgieva@verum.bg), ref: 033/30.10.2019

**Study design**
Multicenter double-blind placebo-controlled interventional randomized clinical study

**Primary study design**
Interventional

**Study type(s)**
Treatment

**Health condition(s) or problem(s) studied**

Reducing illness duration of acute upper respiratory tract infections

### Interventions
Study 1 (18 to 60 years old): Aviron Rapid or Placebo giving orally as follows: Day I: 3x3 tbl; Day II: 3x2 tbl; Day III: 3x1 tbl; Day IV: 3x1 tbl; Day V: 3x1 tbl
Study 2 (13 to 17 years old): Aviron Rapid or Placebo giving orally as follows: Day I: 3x3 tbl; Day II: 3x2 tbl; Day III: 3x1 tbl; Day IV: 3x1 tbl; Day V: 3x1 tbl
Study 3 (5 to 12 years old): Aviron Rapid or Placebo giving orally as follows: Day I: 3x2 tbl; Day II: 3x1 tbl; Day III: 3x1 tbl; Day IV: 3x1 tbl; Day V: 3x1 tbl; Day VI: 3x1 tbl; Day VII: 3x1 tbl
In study 1 and study 2, the participants are to be followed up twice daily for 5 days; in study 3 the participants are to be followed up twice daily for 7 days.
To ensure randomization, every package will have a unique number generated by randomization software. The patients who will meet the trial inclusion criteria will be randomized by Randomsamp® software (Randomsapp™ Software, Varna, Bulgaria). Participants will be randomly allocated to either the treatment or the control group.

### Intervention Type
Supplement

### Primary outcome(s)
1. Number of clinically recovered patients. Clinical recovery: patients are considered clinically recovered only if the following criteria are all met: all symptoms are improved to 'Lack of symptoms' or 'Very mild' (the severity of each clinical symptom decreased to ≤2 points and there is no complaint persistence by the end of the trial period), as their summary score is ≤12 points and it is determined by the sum of the severity of each symptom. In addition, axillary temperature has been permanently reduced to <37.0°C (there are two consecutive measurements at every 12 hours, where the value is <37.0°C) and no complaint persistence by the end of the trial period, in addition, the value of the measured axillary temperature is <37.0° C, without antipyretics taking.
2. Average disease duration, defined as the interval between the initiation of treatment and the period where the patient meets the criteria for “Clinically well” in all 3 studies. The severity of symptoms (headache, fatigue/easy fatigue, sleep disturbances, nasal congestion, sore throat, cough) will be evaluated by a Visual Pain Scale for the symptoms severity (0 = Lack of symptoms; 2 = Very mild symptoms; 4 = Mild symptoms; 6 = Moderate symptoms; 8 = Severe symptoms, 10 = Very severe) and will be recorded in the patient diary data.

### Key secondary outcome(s))
1. Temperature measured using standard electronic pen thermometers at baseline and up to the recovery period (Days 1-5 or 1-7), at 12-hour intervals
2. Symptoms and severity of each symptom: headache, fatigue/easy fatigue, sleep disturbances, nasal congestion, sore throat, cough. The severity of each symptom will be evaluated by a VAS (0-10) for the symptom severity (0 = Lack of symptoms; 2 = Very mild symptoms; 4 = Mild symptoms; 6 = Moderate symptoms; 8 = Severe symptoms, 10 = Very severe) at baseline and up to the recovery period (Days 1-5 or 1-7), at 12-hour intervals

### Completion date
16/03/2020

## Eligibility

### Key inclusion criteria

1. Both male and female patients, at the age of 18-60 years, including for study 1; 13-17 years, including for study 2; and 5-12 years, including for study 3
2. Diagnosis Acute upper respiratory tract viral infection in terms of axillary temperature >37.0°C at the moment of examination, and at least one of the symptoms: nasal congestion, sore throat, cough, headache, fatigue/easy fatigue, sleep disturbances
3. First symptom presented in previous 24 hours to GP visit
4. Patient's Informed Consent for study participation signed by the patient in study 1, or by one parent/guardian in study 2 and study 3.

## Participant type(s)
Patient

## Healthy volunteers allowed
No

## Age group
Mixed

## Lower age limit
5 years

## Upper age limit
60 years

## Sex
All

## Total final enrolment
1264

## Key exclusion criteria
1. Inosine acedoben dimepranol, Rimantadine hydrochloride intake.
2. Patients prescribed oseltamivir, zanamivir.
3. Presumed pneumonia, bacterial infection, or severe disease requiring antibacterial agents beginning on the first day of disease.
4. Inclusion of antibiotic in therapy during the study.
5. Clinical symptoms of severe influenza/acute upper respiratory tract infection requiring hospitalization.
6. Presumed initial disease symptoms, similar to influenza/acute upper respiratory tract symptoms due to other infectious diseases, flu-like syndrome at the beginning of systemic connective tissue diseases, oncohematological and other diseases.
7. Medical history of primary and secondary immunodeficiencies.
8. Medical history of sarcoidosis.
9. Patients with diabetes or severe chronic heart, liver, kidney or brain disease.
10. Oncological diseases.
11. Exacerbation or decompensation of chronic diseases affecting the ability to participate in the clinical trial.
12. Medical history of polyvalent allergy.
13. Allergy/intolerance to some of ingredients of the tested product used upon the treatment.
14. Malabsorption syndrome, including congenital or acquired lactase or other disaccharide deficit, galactosemia.

15. Drug addiction, consumption of 2 or more alcohol units per day by the patient.
16. Mental disorders of the patient.
17. Patients according to the researcher's opinion, shall not comply with the study requirements or product dosing regimen.
18. Participation in other clinical trials within 3 months prior to study inclusion.

**Date of first enrolment**
27/01/2020

**Date of final enrolment**
09/03/2020

# Locations

**Countries of recruitment**
Bulgaria

**Study participating centre**
**85 GP practices in Bulgaria**
-
-
Bulgaria
-

# Sponsor information

**Organisation**
Neopharm Bulgatia Ltd.

# Funder(s)

**Funder type**
Industry

**Funder Name**
Neopharm Bulgaria Ltd.

# Results and Publications

**Individual participant data (IPD) sharing plan**

The datasets generated during and/or analysed during the current study are/will be available upon request from: Margarita Futekova, m.futekova@neopharm.bg
What data in particular will be shared?
Individual participant data that underlie the results reported in this article, after deidentification (text, tables and figures).
What other documents will be available?
Study Protocol, Statistical Analysis Plan, Informed Consent Form, Clinical Study Report
When will data be available (start and end dates)?
Immediately following publication and ending 12 months following article publication.
With whom?
Researchers who provide a methodologically sound proposal.
For what types of analyses?
For individual participant data meta-analysis.

## IPD sharing plan summary

Available on request

## Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|---|---|---|---|---|---|
| Results article | | 28/02/2021 | 07/06/2023 | Yes | No |
| Other files | Patient Diary | | 23/03/2022 | No | Yes |
| Participant information sheet | | | 23/03/2022 | No | Yes |
| Protocol file | | 01/10/2019 | 23/03/2022 | No | No |