



## Clinical trial results: Specific immunotherapy of birch pollen-related food allergy Summary

EudraCT number	2011-001221-24
Trial protocol	AT
Global end of trial date	02 July 2020

### Results information

Result version number	v1 (current)
This version publication date	10 April 2021
First version publication date	10 April 2021
Summary attachment (see zip file)	summary (Summary.pdf)

### Trial information

#### Trial identification

Sponsor protocol code	01/2011tk
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#### Additional study identifiers

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

Notes:

### Sponsors

Sponsor organisation name	Medical University of Vienna
Sponsor organisation address	Währinger Gürtel 18-20, Vienn, Austria, 1090
Public contact	Barbara Bohle, Medical University of Vienna, +43 01404005114, barbara.bohle@meduniwien.ac.at
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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:

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**Results analysis stage**

Analysis stage	Final
Date of interim/final analysis	07 February 2020
Is this the analysis of the primary completion data?	Yes
Primary completion date	07 February 2020
Global end of trial reached?	Yes
Global end of trial date	02 July 2020
Was the trial ended prematurely?	No

Notes:

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**General information about the trial**

Main objective of the trial:

Treatment of apple allergy in birch pollen allergic patients

Protection of trial subjects:

Allergies are observed

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	04 June 2012
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

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**Population of trial subjects****Subjects enrolled per country**

Country: Number of subjects enrolled	Austria: 60
Worldwide total number of subjects	60
EEA total number of subjects	60

Notes:

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**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)	60
From 65 to 84 years	0
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details:

preselection of patients June to December 2012

### Pre-assignment

Screening details:

in a 6 months recruitment period, we screened 72 patients for the study. 60/72 patients were selected and randomly assigned to daily sublingual application of placebo or 25 µg Mal d 1 or 25 µg Bet v 1 (n 20 in each group)

### Period 1

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

Blinding implementation details:

60 patients were randomized by Randomizer(R) in 3 treatment arms each 20 patients

### Arms

Are arms mutually exclusive?	Yes
<b>Arm title</b>	rMal d 1 Treatment arm

Arm description:

20 patients were treated with 25µg rMal d 1 liquid per day sublingually over a period of 4 months

Arm type	Experimental
Investigational medicinal product name	rMal d 1 liquid
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Oral liquid
Routes of administration	Submucosal use

Dosage and administration details:

25µg id rMal d 1 liquid per day sublingually

<b>Arm title</b>	rBet v1 treatment arm
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Arm description:

20 patients were treated with 25µg rBet v1 liquid per day sublingually over a period of 4 months

Arm type	Active comparator
Investigational medicinal product name	rBet v1
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Oral liquid
Routes of administration	Sublingual use

Dosage and administration details:

25µg rBet v1 liquid per day sublingually administered over a period of 4 months

<b>Arm title</b>	placebo
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Arm description:

20 patients were treated with 25µg of solvent liquid per day sublingually over a period of 4 months

Arm type	Placebo
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Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Oral liquid
Routes of administration	Sublingual use

Dosage and administration details:

25µg solvent liquid per day sublingually over a period of 4 months

<b>Number of subjects in period 1</b>	<b>rMal d 1 Treatment arm</b>	<b>rBet v1 treatment arm</b>	<b>placebo</b>
Started	20	20	20
Completed	20	17	19
Not completed	0	3	1
Consent withdrawn by subject	-	1	-
moved	-	1	-
Lost to follow-up	-	1	1

## Baseline characteristics

### Reporting groups

Reporting group title	Study period (overall period)
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Reporting group description: -

Reporting group values	Study period (overall period)	Total	
Number of subjects	60	60	
Age categorical Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	60	60	
From 65-84 years	0	0	
85 years and over	0	0	
Gender categorical Units: Subjects			
Female	31	31	
Male	29	29	

## End points

### End points reporting groups

Reporting group title	rMal d 1 Treatment arm
Reporting group description:	20 patients were treated with 25µg rMal d 1 liquid per day sublingually over a period of 4 months
Reporting group title	rBet v1 treatment arm
Reporting group description:	20 patients were treated with 25µg rBet v1 liquid per day sublingually over a period of 4 months
Reporting group title	placebo
Reporting group description:	20 patients were treated with 25µg of solvent liquid per day sublingually over a period of 4 months

### Primary: DBPC sublingual challenge with increasing dosages of r Mal d1 and fresh apple

End point title	DBPC sublingual challenge with increasing dosages of r Mal d1 and fresh apple
End point description:	
End point type	Primary
End point timeframe:	Comparison of DBPC sublingual challenge with increasing dosages of r Mal d1 and fresh apple before and after the treatment with r Mal d1

End point values	rMal d 1 Treatment arm	rBet v1 treatment arm	placebo	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	20	20	20	
Units: µg				
number (not applicable)	15	6	0	

### Statistical analyses

Statistical analysis title	DBPC sublingual challenge with increasing dosages
Comparison groups	rMal d 1 Treatment arm v rBet v1 treatment arm v placebo
Number of subjects included in analysis	60
Analysis specification	Pre-specified
Analysis type	equivalence
P-value	≥ 0.001
Method	Sign test

## Adverse events

### Adverse events information<sup>[1]</sup>

Timeframe for reporting adverse events:

From August 2013 to End of November 2013 during the treatment period of 4 months

Adverse event reporting additional description:

in all three groups, all patients reported at first application slight tingling in the lining of the mouth, itching in the mouth and ear that disappeared without any treatment within 15 minutes.  
in the course of the treatment, this symptoms decreased in both verum groups while in the placebo group no significant symptom decrease was seen.

Assessment type	Systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	1
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### Reporting groups

Reporting group title	r Mal d 1 treatment group
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Reporting group description:

20 patients with birch pollen associated apple allergy who were treated with daily sublingually applied 25µg r Mal d 1 over 4 months

Reporting group title	r Bet v 1 treatment group
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Reporting group description:

20 patients with birch pollen associated apple allergy who were treated with daily sublingually applied 25µg r Bet v 1 over 4 months

Reporting group title	placebo group
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Reporting group description:

20 patients with birch pollen associated apple allergy who were treated with daily sublingually applied 25µg of the solvent of the verum preparations over 4 months

Serious adverse events	r Mal d 1 treatment group	r Bet v 1 treatment group	placebo group
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 20 (0.00%)	0 / 20 (0.00%)	0 / 20 (0.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0

Frequency threshold for reporting non-serious adverse events: 1 %

Non-serious adverse events	r Mal d 1 treatment group	r Bet v 1 treatment group	placebo group
Total subjects affected by non-serious adverse events			
subjects affected / exposed	0 / 20 (0.00%)	0 / 20 (0.00%)	0 / 20 (0.00%)

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Notes:

[1] - There are no non-serious adverse events recorded for these results. It is expected that there will be at least one non-serious adverse event reported.

Justification: no serious adverse events have occurred



## **More information**

### **Substantial protocol amendments (globally)**

Were there any global substantial amendments to the protocol? No

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### **Interruptions (globally)**

Were there any global interruptions to the trial? No

### **Limitations and caveats**

None reported