

# A multi-site trial of a novel nutritional supplement (taurine, omega-3 fatty acids, zinc, antioxidants, and lutein) and micro-current stimulation in the treatment of atrophic (dry) age-related macular degeneration

<b>Submission date</b> 27/12/2006	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 28/12/2006	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 25/09/2009	<b>Condition category</b> Eye Diseases	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Francis Cangemi

**Contact details**  
119 Prospect Street  
Ridgewood, NJ  
United States of America  
7450

## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

# Study information

## Scientific Title

## Acronym

TOZAL

## Study objectives

1. A novel nutritional supplement containing antioxidants and omega-3 fatty acids improves visual acuity in patients with atrophic (dry) age-related macular degeneration.
2. Micro-current stimulation in combination with a novel nutritional supplement containing antioxidants and omega-3 fatty acids improves visual acuity in patients with atrophic (dry) age-related macular degeneration.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Independent Ethics Committee/Institutional Review Board approvals were received in April 2004 from the University of California Irvine Medical Center and Ohio State University.

## Study design

Randomised prospective investigator, subject and sponsor masked trial

## Primary study design

Interventional

## Secondary study design

Randomised controlled trial

## Study setting(s)

Not specified

## Study type(s)

Treatment

## Participant information sheet

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

Atrophic (dry) age-related macular degeneration

## Interventions

Nutritional supplement for six months consisting of vitamin A 10,000 IU, beta-carotene 18,640 IU, vitamin E 200 IU, vitamin C 452 IU, zinc 69.6 mg, lutein 8 mg, taurine 400 mg, omega-3 fatty acids 300 mg in combination with a micro-current stimulation device or a sham micro-current stimulation device (randomised).

**Intervention Type**

Supplement

**Phase**

Not Specified

**Drug/device/biological/vaccine name(s)**

Nutritional supplement

**Primary outcome measure**

Measure the change in visual acuity from baseline at six months.

**Secondary outcome measures**

Measure objective signs of improved macular function.

**Overall study start date**

01/04/2004

**Completion date**

05/04/2005

**Eligibility****Key inclusion criteria**

1. Signed written consent
2. Between the ages of 50 and 90, inclusive
3. Any race or gender
4. Diagnosis of nonexudative (dry) Age-related Macular Degeneration (AMD) in at least one eye having more than ten large soft drusen 63 um in diameter, within 3,000 um of the fovea centre, documented on macular exam, retinal angiography and fundus photographs
5. Able to understand and comply with the requirements of the trial
6. Best Corrected Visual Acuity (BCVA) in the trial eye(s) of 20/32 to 20/125 inclusive as measured by Early Treatment Diabetic Retinopathy Study (ETDRS) (logMAR)
7. Subjects must not have conditions that limit the view to the fundus (e.g. vitreous haemorrhage, cataracts, an epiretinal membrane). All subjects with more than or equal to 2+ nuclear opacities and/or significant central opacity (Posterior SubCapsular opacity [PSC] or Anterior SubCapsular opacity [ASC]) more than 1+ will undergo Potential Acuity Meter (PAM) testing. If the vision is more than or equal to two lines improved on PAM over standard acuity measurement then the subject will not be eligible for the trial
8. Subjects must be available for a minimum trial duration of approximately six months
9. Subjects must agree to take only the nutritional supplement that is provided during this study
10. Subjects or eyes must not meet any of the exclusion criteria

**Participant type(s)**

Patient

**Age group**

Senior

**Sex**

Not Specified

**Target number of participants**

80

**Key exclusion criteria**

Any of the following excluded a subject from the trial:

1. Currently enrolled in an ophthalmic clinical trial
2. Eyes with concomitant macular or choroidal disorders other than AMD and with indefinite signs of AMD
3. Eyes with a diagnosis of exudative (wet) AMD with active SubRetinal NeoVascularisation (SRNV) or Choroidal NeoVascularisation (CNV) lesions requiring laser photocoagulation in the study eye
4. Subjects with significant ocular lens opacities causing vision decrease
5. Subjects with amblyopia
6. Subjects with optic nerve disease (neuropathy, atrophy, papilledema), unstable glaucoma as defined by intraocular pressures greater than 25 mmHg, three or more glaucoma medications, C/D of 0.8 or greater and visual fields consistent with glaucoma; history of retina-vitreous surgery, degenerative myopia, active posterior intraocular inflammatory disease, chronic use of topical ocular steroid medications, vasoproliferative retinopathies (other than AMD), rhegmatogenous retinal detachment, and inherited macular dystrophies
7. Subjects with demand type pacemakers or epilepsy
8. Subjects with uncontrolled hypertension (defined as diastolic of 90 or greater and systolic of 150 or greater)
9. Subjects with recent history (within the previous year) of cerebral vascular disease manifested with Transient Ischaemic Attacks (TIAs) or cerebral vascular accidents (CVAs)
10. Subjects with a history of Acquired Immune Deficiency Syndrome (AIDS)
11. Subjects who have received any previous experimental procedure in either eye or the use of any investigational drug or treatment within 30 days prior to enrolling in the trial
12. Subjects who have had intraocular surgery in trial eye within three months prior to enrolling in the trial
13. Smokers or any tobacco use

**Date of first enrolment**

01/04/2004

**Date of final enrolment**

05/04/2005

**Locations**

**Countries of recruitment**

United States of America

**Study participating centre**

119 Prospect Street

Ridgewood, NJ

United States of America

7450

# Sponsor information

## Organisation

Atlantic Medical, Inc. (USA)

## Sponsor details

1213 Culbreth Drive  
Wilmington, NC  
United States of America  
28405

## Sponsor type

Industry

# Funder(s)

## Funder type

Industry

## Funder Name

Atlantic Medical, Inc. (USA)

# Results and Publications

## Publication and dissemination plan

Not provided at time of registration

## Intention to publish date

## Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	26/02/2007		Yes	No