**Assessment of systemic exposure to capsaicin following intranasal administration**

**Protocol**

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| --- | --- |
| **Research site** | **Principal Investigator** |
| Queensland Allergy Services | Professor Peter Smith |

 NIIM trial Reference Number: 0118E-2022

**Funding / Compensation**

Participants Will be paid $500 total for volunteering for this study

|  |  |
| --- | --- |
| Title of clinical Trial  | Assessment of systemic exposure to capsaicin following intranasal administration |
| Trial Phase (I, II, III, IV) | Phase 1 bio-availability trial |
| Principal Investigator | Pete Smith |
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| Study Site | Queensland Allergy Services Pty Ltd |
| Medical condition or disease under investigation | Healthy adult controls |
| Primary objective | To investigate the systemic (plasma) levels of capsaicin following nasal application at the dose shown to be effective for at home administration (0.01 mM) or outpatient administration in the hospital (0.1 mM) |
| Trial Design | An uncontrolled, single-arm, open-label, single center, academic trial with unrestricted research grant. |
| Endpoints | To determine the mean concentration of capsaicin in the blood at 5 times points: 5 min, 10 min, 1h, 3h, 6h after nasal application of the 0.01 mM and 0.1 mM. |
| Sample Size | 26 Healthy volunteers (preferentially gender balanced) |
| IMP, dosage and route of administration | 0.01mM capsaicin nasally applied0.1 mM capsaicin nasally applied |
| Active comparator product(s) | N/A |
| Maximum duration of treatment and Follow Up of a Participant | Maximum 7 hours per visit |
| Maximum duration of entire Trial | 6 months |

**ROLES AND RESPONSIBILITIES**

The Principle Investigator (PI) is responsible for the conduct of the Trial at his Participating Site, and for protecting the rights, safety and well-being of the Trial participants. As such the PI must ensure adequate supervision of the Trial conduct at the Participating Site. If any tasks are delegated, the PI will maintain a log of appropriately qualified persons to whom he has delegated specified Trial-related duties. The PI will ensure that adequate training is provided and documented for all Trial staff, prior to conducting assigned Trial-related activities.

The PI is responsible for the general conduct (e.g. Trial progress, communication, protocol training support of the participating sites, annual reporting to the Ethics Committee (EC), end of Trial notification(s). The PI fulfils both Investigator and Sponsor responsibilities, as outlined in International Conference on Harmonisation – Good Clinical Practice (ICH-GCP) E6(R2) and applicable regulations.

Trial Flowchart

Schedule of Events – Trial specific Procedures / Assessments

|  |  |  |
| --- | --- | --- |
| Visit/contacts | Visit 1 | Visit 2 |
| Timing | Start-up procedures | 5 min,10 min, 1h, 3h and 6h after intranasal administration | V1 + 1-2 weeks  | 5 min,10 min, 1h, 3h and 6h after intranasal administration |
| Informed consent1 | X |  |  |  |
| Inclusion / Exclusion criteria | X |  |  |  |
| Urine pregnancy test (for WOCBP only) | X |  | X |  |
| Demographics | X |  |  |  |
| Medical history | X |  |  |  |
| Physical exam | X |  |  |  |
| Weight/Height | X |  |  |  |
| Vital signs | X |  | X |  |
| Nasal endoscopy | X |  |  |  |
| Concomitant Medication (CM) | X |  | X |  |
| Administration of 0,1 mM or 0.01 mM capsaicin | X |  | X |  |
| Blood drawing |  | X |  | X |
| (Serious) Adverse event (S)(AE) assessment |  | X |  | X |

**Trial Objectives and Design**

**Trial objectives**

The primary objective is to investigate the systemic (plasma) levels of capsaicin following nasal application at the dose shown to be effective for at home administration (0.01 mM) or outpatient administration in the hospital (0.1 mM)

**Primary Endpoints**

To determine the mean concentration of capsaicin in the blood 5 min, 10 min, 1h, 3h and 6h after intranasal application of 0.01 mM and 0.1 mM capsaicin.

**Trial Design**

This trial is an uncontrolled, single-arm, open-label, monocentric, academic trial.

All participants receive the same nasal application of 2 doses of capsaicin (0,01mM and 0,1mM) with a washout period of 1 to 2 weeks in between both doses. The trial is organised in an open-labelled manner since subjects will be able to distinguish between the two doses by the severity of the burning sensation after application.

26 healthy volunteers will be enrolled at Queensland Allergy Services.

**Expected Duration of the Tria****l**

The trial will be open for inclusion until the total number of subjects is reached. For each individual participant the trial visit will take 2 visits in the hospital of about 7 hours. This includes a general introduction and medical background screening, a capsaicin application and a blood draw 5 min, 10 min, 1h, 3h and 6h after each application.

**Trial Population / Eligibility Criteria**

**Inclusion criteria**

Participants eligible for inclusion in this Trial must meet **all** of the following criteria:

1. Voluntary written informed consent of the participant or their legally authorized representative has been obtained prior to any screening procedures
2. Healthy subjects
3. Between 18-55 years of age

All participants that are considered for Trial participation, per the above criteria will be documented on the Screening Log, including Screen Failures.

**Exclusion criteria**

Participants eligible for this Trial must **not** meet any of the following criteria:

1. Participant has a history of psychiatric disorders or is unreliable in the opinion of the investigator.
2. Participant has a history of symptoms or diagnosis of allergic rhinitis, asthma, chronic rhinosinusitis with or without nasal polyps, major septal deviation, nasal surgery or other upper airway diseases.
3. Any disorder, which in the Investigator’s opinion might jeopardise the participant’s safety or compliance with the protocol
4. Participants with a known sensitivity to capsaicin or any ingredients in the formulation
5. Participants who smoke.
6. Any prior or concomitant treatment(s) that might jeopardise the participant’s safety or that would compromise the integrity of the trial
7. Female participants who are currently pregnant or breast-feeding.
8. Participation in an interventional Trial with an investigational medicinal product (IMP) or device 15 days before signing informed consent.
9. Participants using any nasal medication that may have an influence on the nasal homeostasis or nasal physiology within 1 week before the capsaicin application.

Participants who meet one or more of the above exclusion criteria **must not proceed** to be enrolled/randomized in the Trial and will be identified on the Screening Log as Screen Failure.

**Trial Procedures**

**Participant consent and withdrawal of consent**

The Trial will be conducted only on the basis of prior informed consent by the Trial participants and/or their legally authorized representative(s). As such, no Trial-related procedures will be conducted prior to obtaining written informed consent from potential Trial participants.

The process for obtaining and documenting initial and continued informed consent from potential Trial participants will be conducted in accordance with ICH-GCP E6(R2), applicable regulatory requirements and internal Standard Operating Procedures (SOPs).

All originally signed obtained Informed Consent Forms (ICFs) must be retained/archived in the Investigator Site File (ISF) at the Participating Site and must not be destroyed (even when a scanned copy is available) before expiration of the legal archiving term as defined in the protocol section entitled “Archiving”.

Participants may voluntarily withdraw consent to participate in the Trial for any reason at any time. The participant’s request to withdraw from the Trial must always be respected without prejudice or consequence to further treatment. Consent withdrawal will be documented in the participant’s medical record.

Trial data and samples collected before withdrawal can be used in the trial. No new trial data or samples will be collected after withdrawal of the participant.

**Selection of Participants / Recruitment**

Recruitment will occur via closed social media for medical students and their friends and via word or mouth from staff at Queensland Allergy Services