



# Anagenix and the Bioeconomy Science Institute presents:

## **BerriQi**

Harnessing Whole Fruit Powder to Innovate the Next Generation of Respiratory Health Product



# The Hidden Toll: Cold, Flu & Pollution in Numbers

Respiratory challenges impact lives globally. Their combined threat extends beyond discomfort to measurable societal costs.



1B

Annual Infections

Common cold cases worldwide each year, with influenza adding 5-10% more.



3<sup>rd</sup>

Leading cause of death

Chronic respiratory diseases, 454M people affected



2-4/6-10

Colds per year

Adults/Children



90%

Population

Lives in and breathes unhealthy air. 7M pollution deaths per year



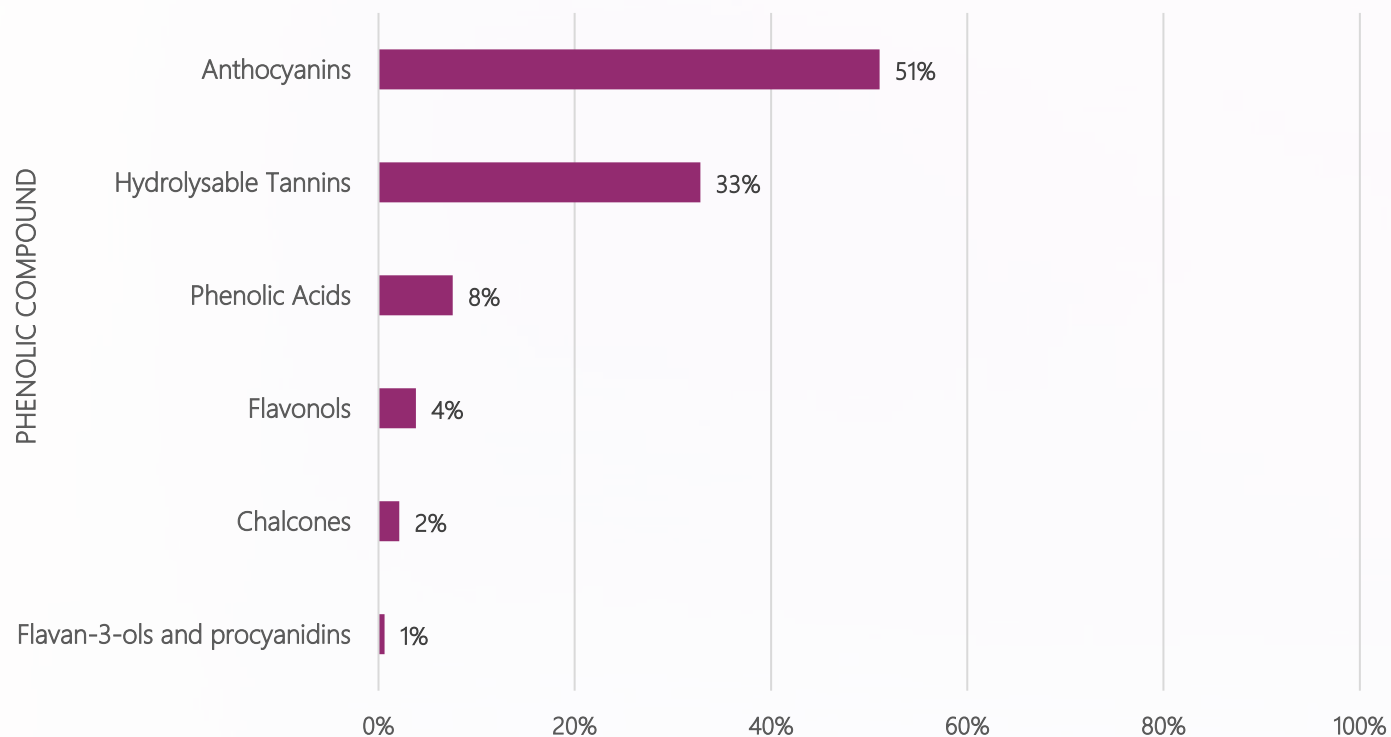
## For Respiratory Immune Balance & Lung Recovery

1. Reduces respiratory symptoms
2. Prevents & reduces respiratory inflammation
3. Prevents & reduces lung damage from stressors such as
  - Asthma
  - Pollution
  - Recent infections
  - Chronic lung conditions
  - High intensity exercise





## POLYPHENOL COMPOSITION OF BERRIQI®



PAQ+ Phytonutrient complex of bioactives responsible for the beneficial properties of BerriQi

## Summary Composition of Polyphenols

Unique **ratio** of boysenberry to apple gives

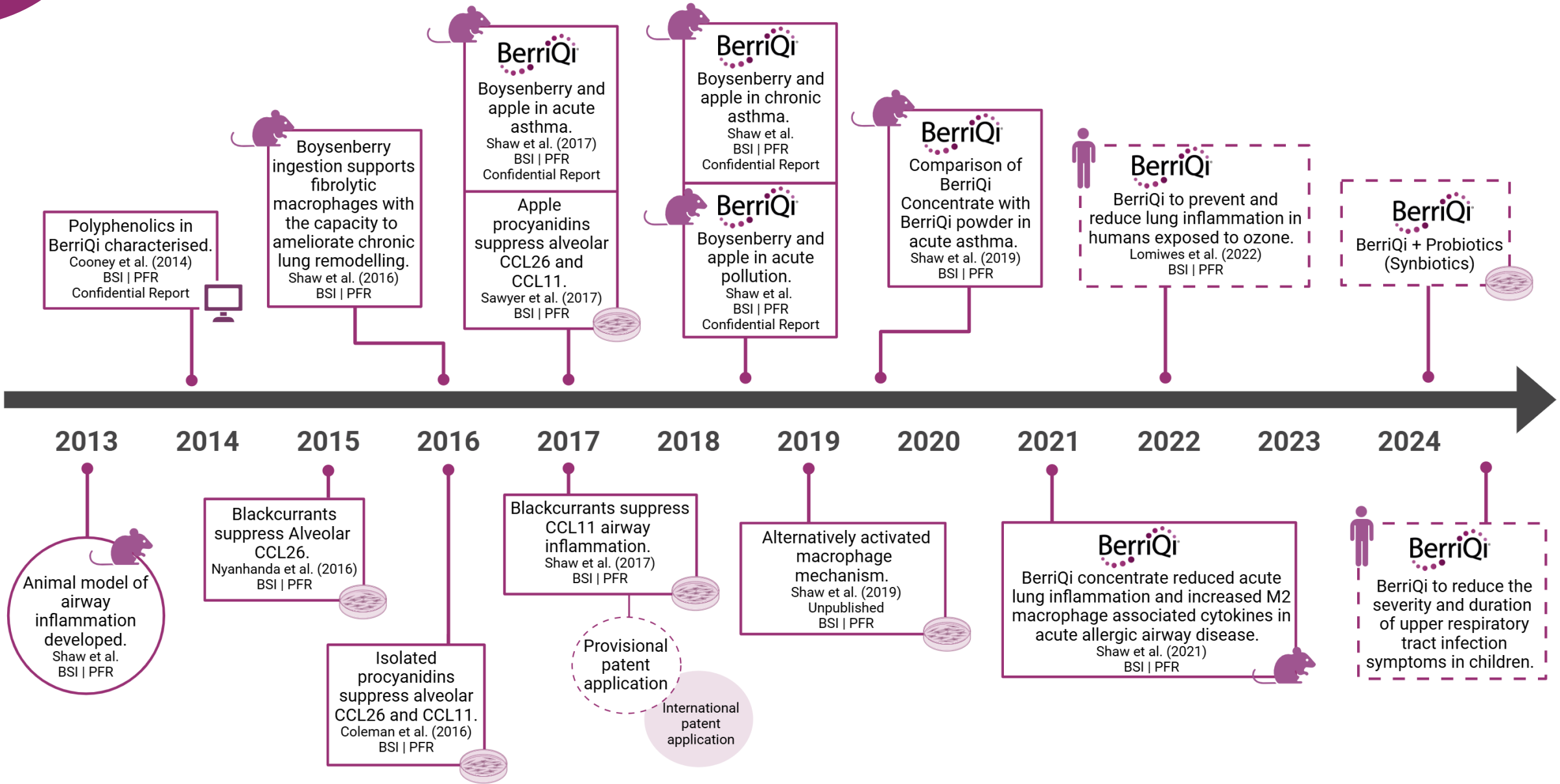
**Guaranteed**

**20%**



Comprising of

- Procyanindins
- Anthocyanins
- Quercetin



Polyphenolics in BerriQi characterised.  
Cooney et al. (2014)  
BSI | PFR  
Confidential Report

Boysenberry ingestion supports fibrolytic macrophages with the capacity to ameliorate chronic lung remodelling.  
Shaw et al. (2016)  
BSI | PFR

**BerriQi**  
Boysenberry and apple in acute asthma.  
Shaw et al. (2017)  
BSI | PFR  
Confidential Report

Apple procyanidins suppress alveolar CCL26 and CCL11.  
Sawyer et al. (2017)  
BSI | PFR

**BerriQi**  
Boysenberry and apple in chronic asthma.  
Shaw et al. (2017)  
BSI | PFR  
Confidential Report

**BerriQi**  
Boysenberry and apple in acute pollution.  
Shaw et al. (2017)  
BSI | PFR  
Confidential Report

**BerriQi**  
Comparison of BerriQi Concentrate with BerriQi powder in acute asthma.  
Shaw et al. (2019)  
BSI | PFR

**BerriQi**  
BerriQi to prevent and reduce lung inflammation in humans exposed to ozone.  
Lomiwes et al. (2022)  
BSI | PFR

**BerriQi**  
BerriQi + Probiotics (Synbiotics)

Animal model of airway inflammation developed.  
Shaw et al. (2013)  
BSI | PFR

Blackcurrants suppress Alveolar CCL26.  
Nyanhanda et al. (2016)  
BSI | PFR

Isolated procyanidins suppress alveolar CCL26 and CCL11.  
Coleman et al. (2016)  
BSI | PFR

Blackcurrants suppress CCL11 airway inflammation.  
Shaw et al. (2017)  
BSI | PFR

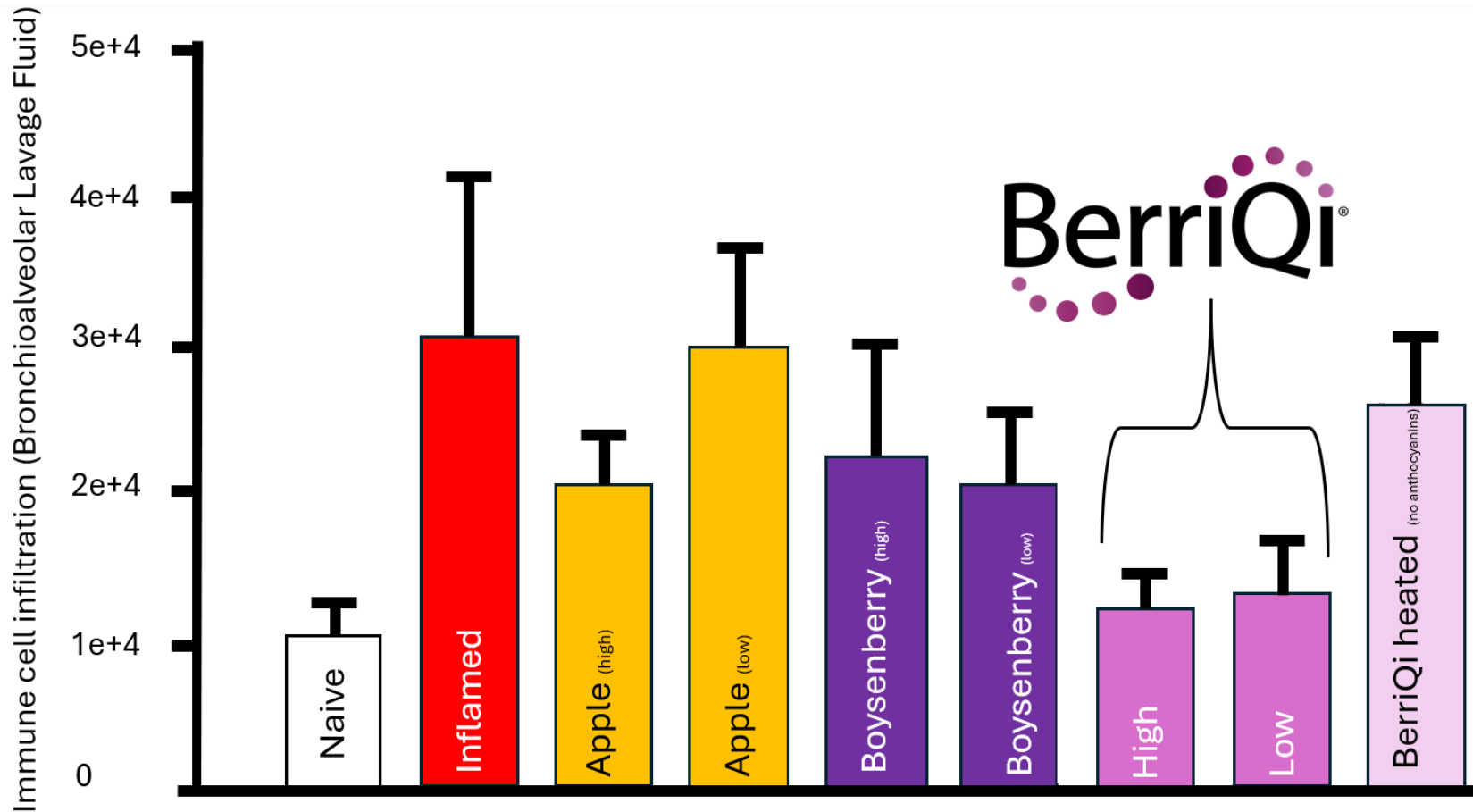
Provisional patent application  
International patent application

Alternatively activated macrophage mechanism.  
Shaw et al. (2019)  
Unpublished  
BSI | PFR

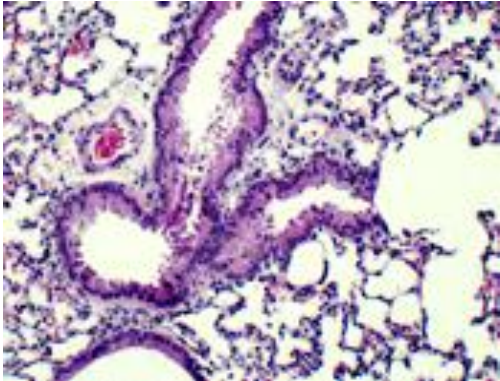
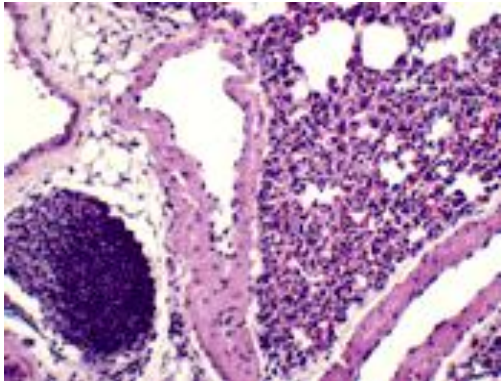
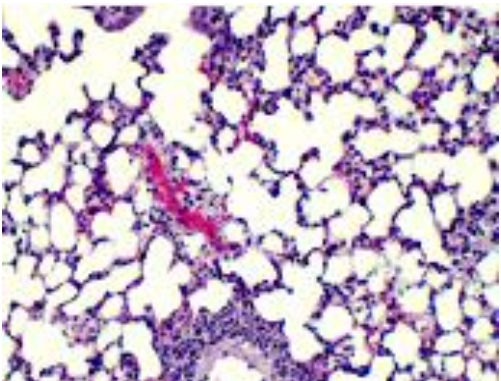
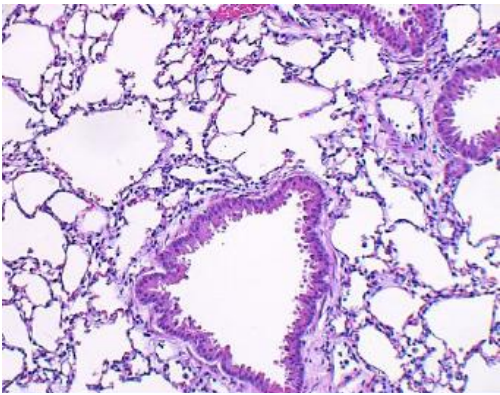
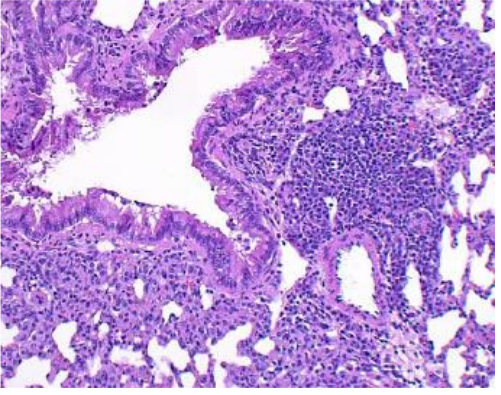
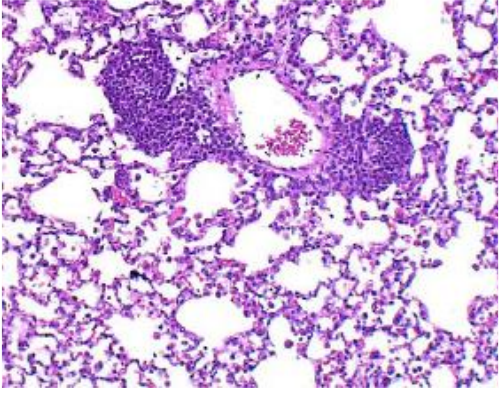
**BerriQi**  
BerriQi concentrate reduced acute lung inflammation and increased M2 macrophage associated cytokines in acute allergic airway disease.  
Shaw et al. (2021)  
BSI | PFR

**BerriQi**  
BerriQi to reduce the severity and duration of upper respiratory tract infection symptoms in children.

# Synergistic combination of Boysenberry and apple is more effective than either alone at reducing lung inflammation

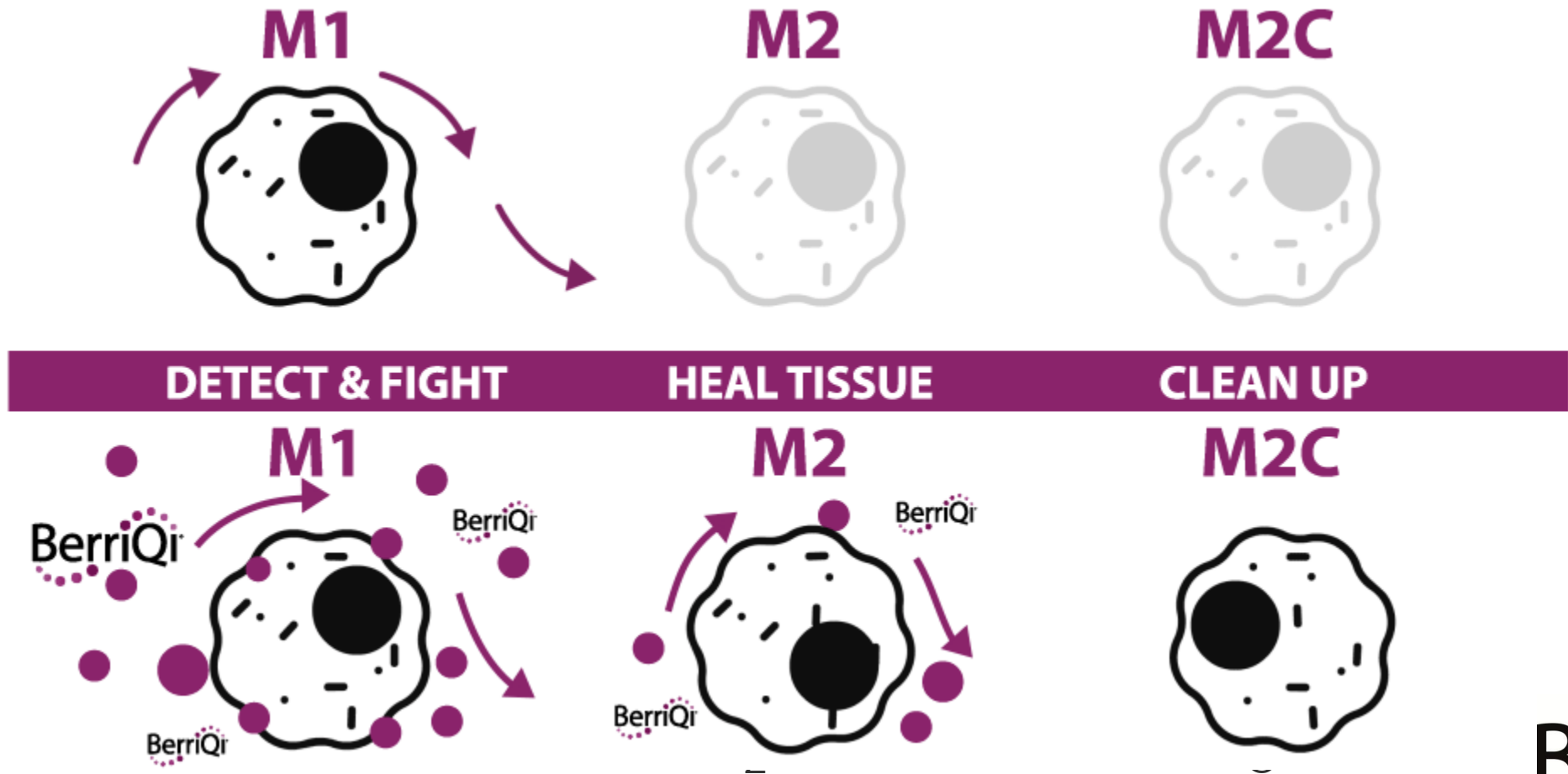


# BerriQi® reduces inflammation in lungs

	Normal Lung Tissue	Activated Immune System	+ BerriQi® treatment
Acute Inflammation			
Chronic Inflammation			

Reduced immune cell infiltration into the lung

# BerriQi® activates the progression of macrophages from M1 to M2 and M2C



# Short-term supplementation with BerriQi® powder reduces ozone-induced respiratory symptoms in healthy adults

Dominic Lomiwes, Grayson Nicholls, Greg Sawyer, Nayer Ngametua, Alex Kannon, Gowthami Vangala, Natalie Burr, Hannah Dinnan, Sheridan Martell & Odette Shaw

Innovation Expo 2025

14 October 2025



# What is the Bioeconomy Science Institute?



Pastoral, agri-food  
and agri-technology



Terrestrial biodiversity  
and land resources



Horticulture, arable,  
seafood and food  
and beverage

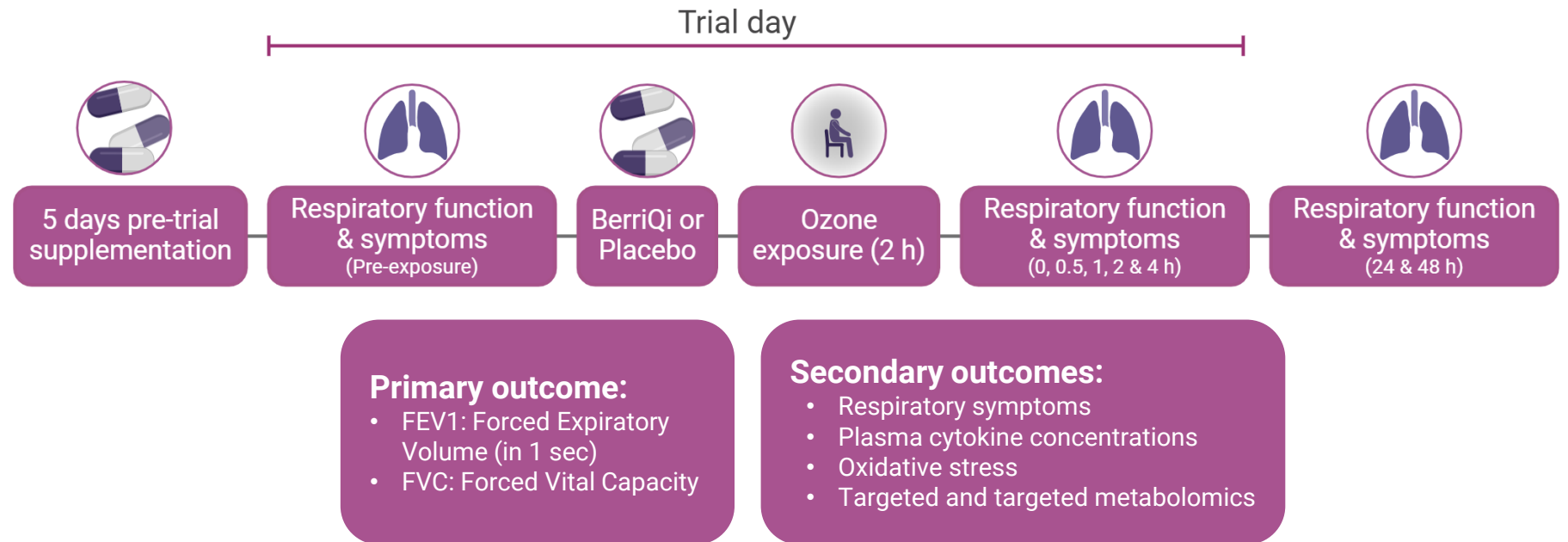
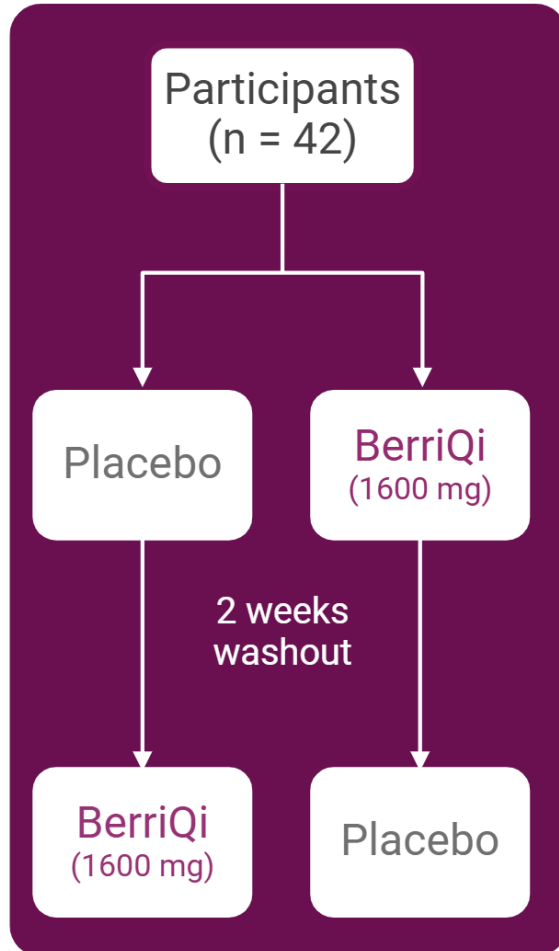


Forestry, biomaterials  
and wood-derived  
products

# BerriQi – Protecting lung health from acute ozone exposure

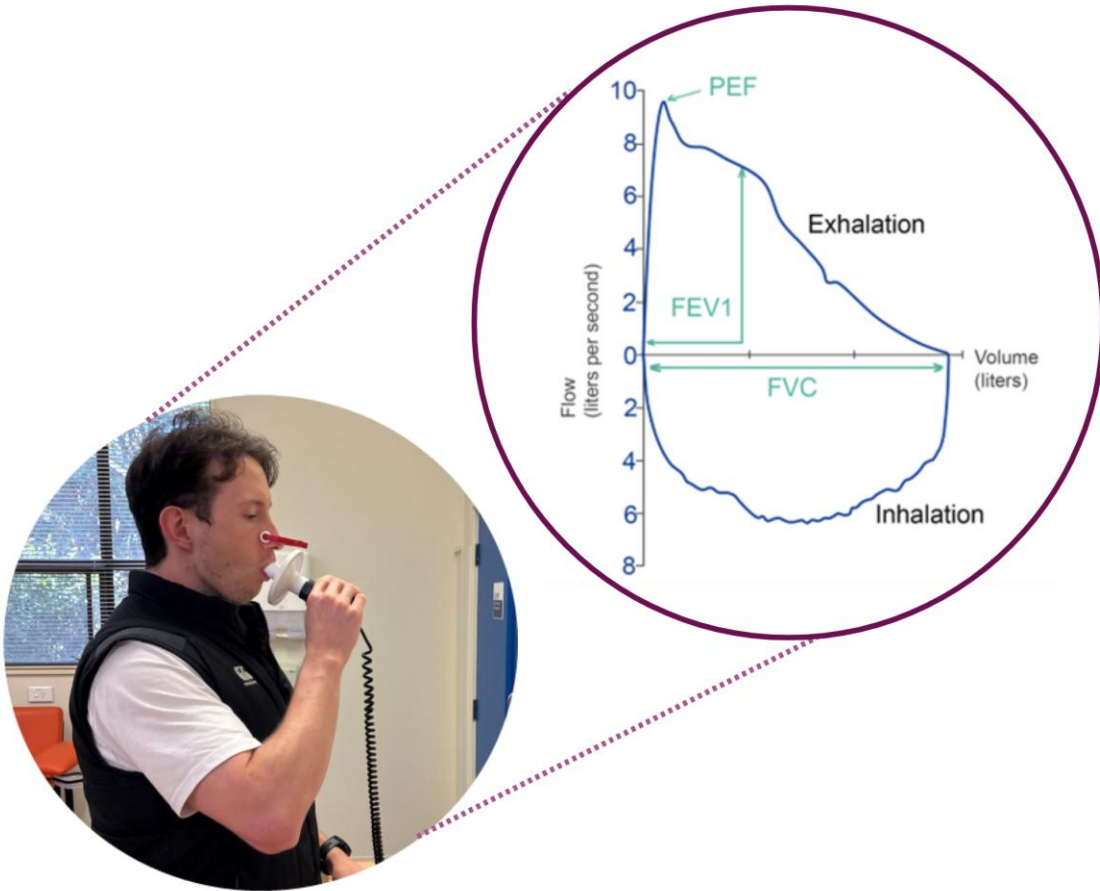


Randomised, double blinded, placebo control crossover study

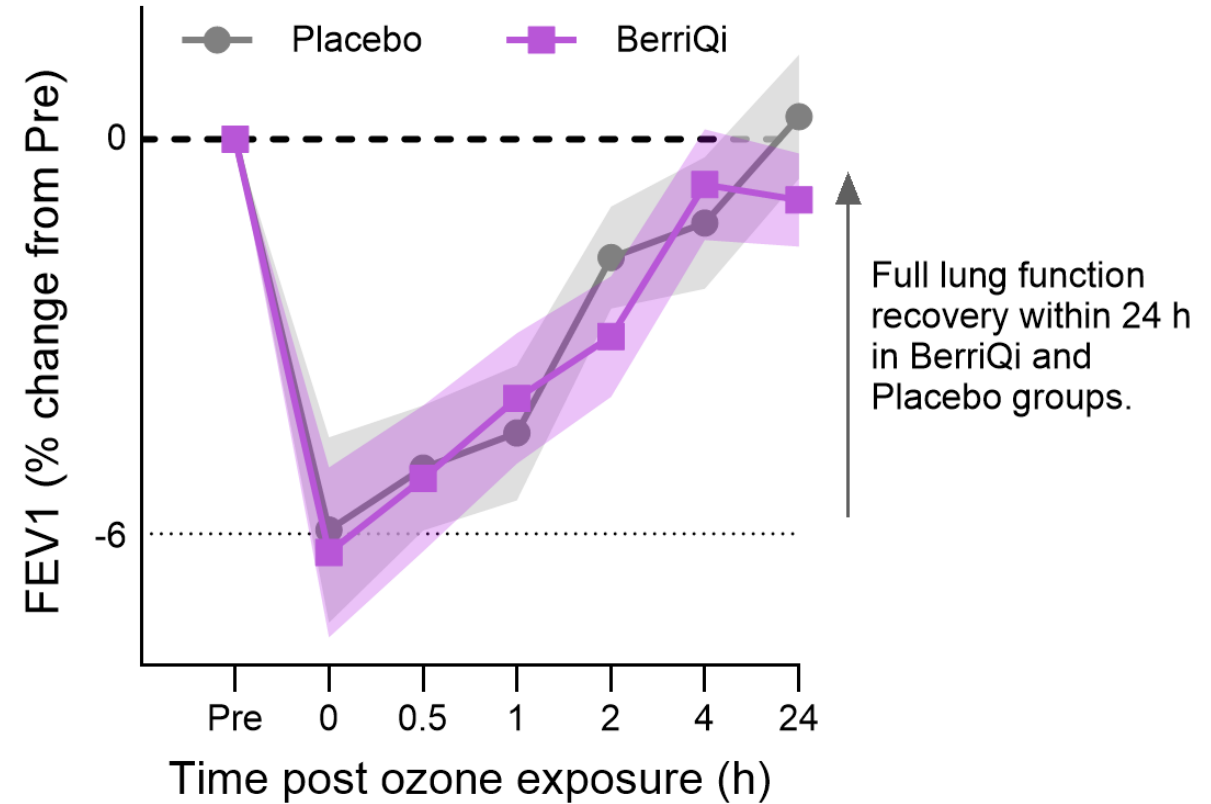


	Males	Females
n	19	23
Age (years)	29.9 ± 8.4	29.6 ± 8.3
Height (cm)	180 ± 6.6	166 ± 6.0
Weight (kg)	81 ± 10	68 ± 15

# Results for Respiratory Function



## Reduced lung function after 2 h ozone exposure

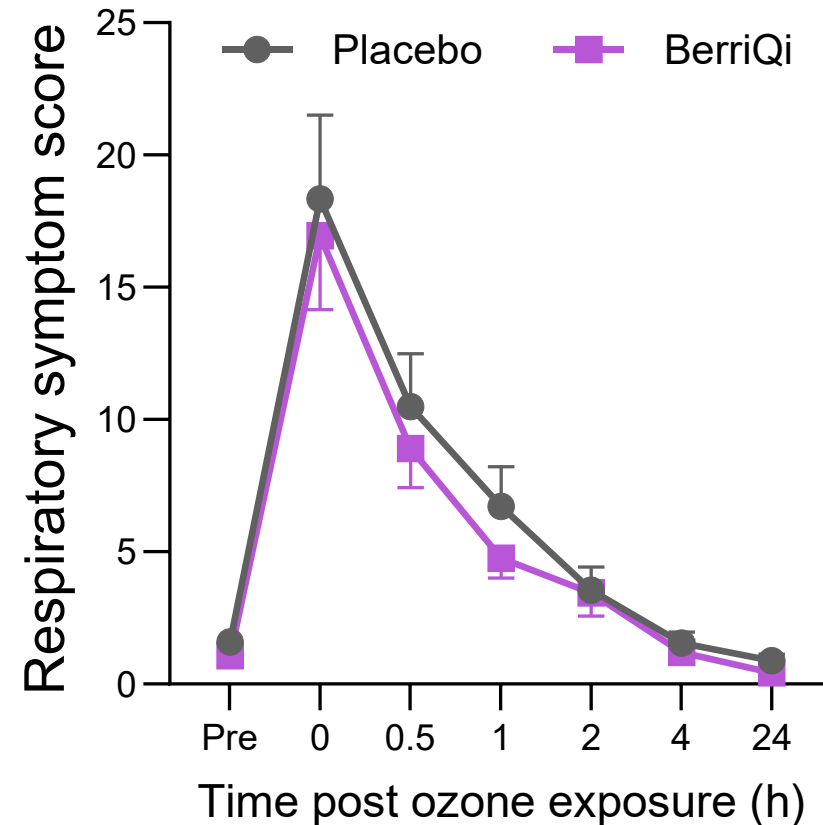
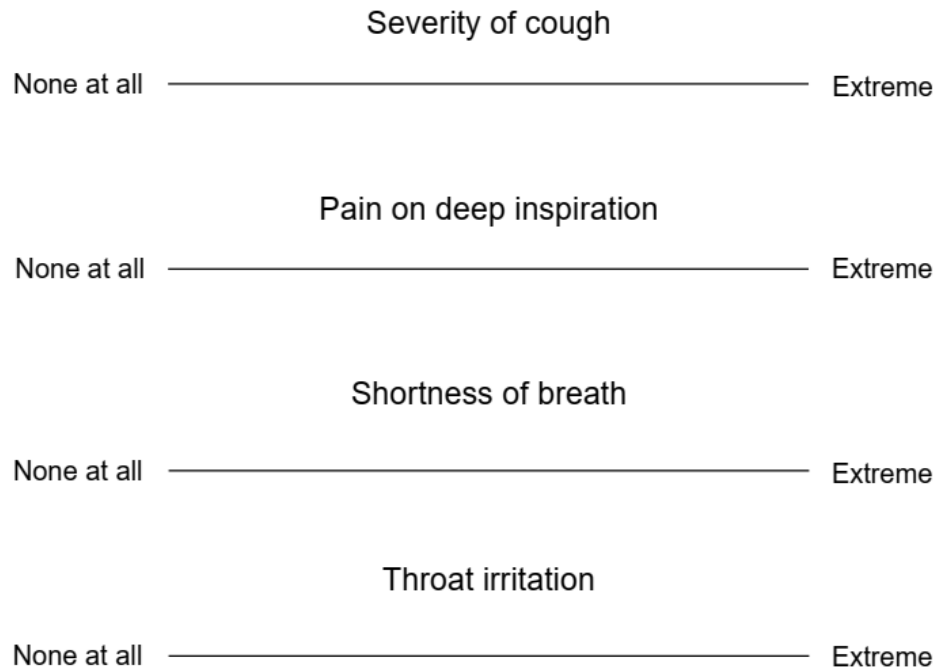


Exposure to 0.2 ppm ozone resulted in an acute reduction in lung function that fully recovered to normal levels within 24 h.

# Results for Respiratory Symptoms



Please rate severity of the following respiratory symptoms at this moment on the scales below

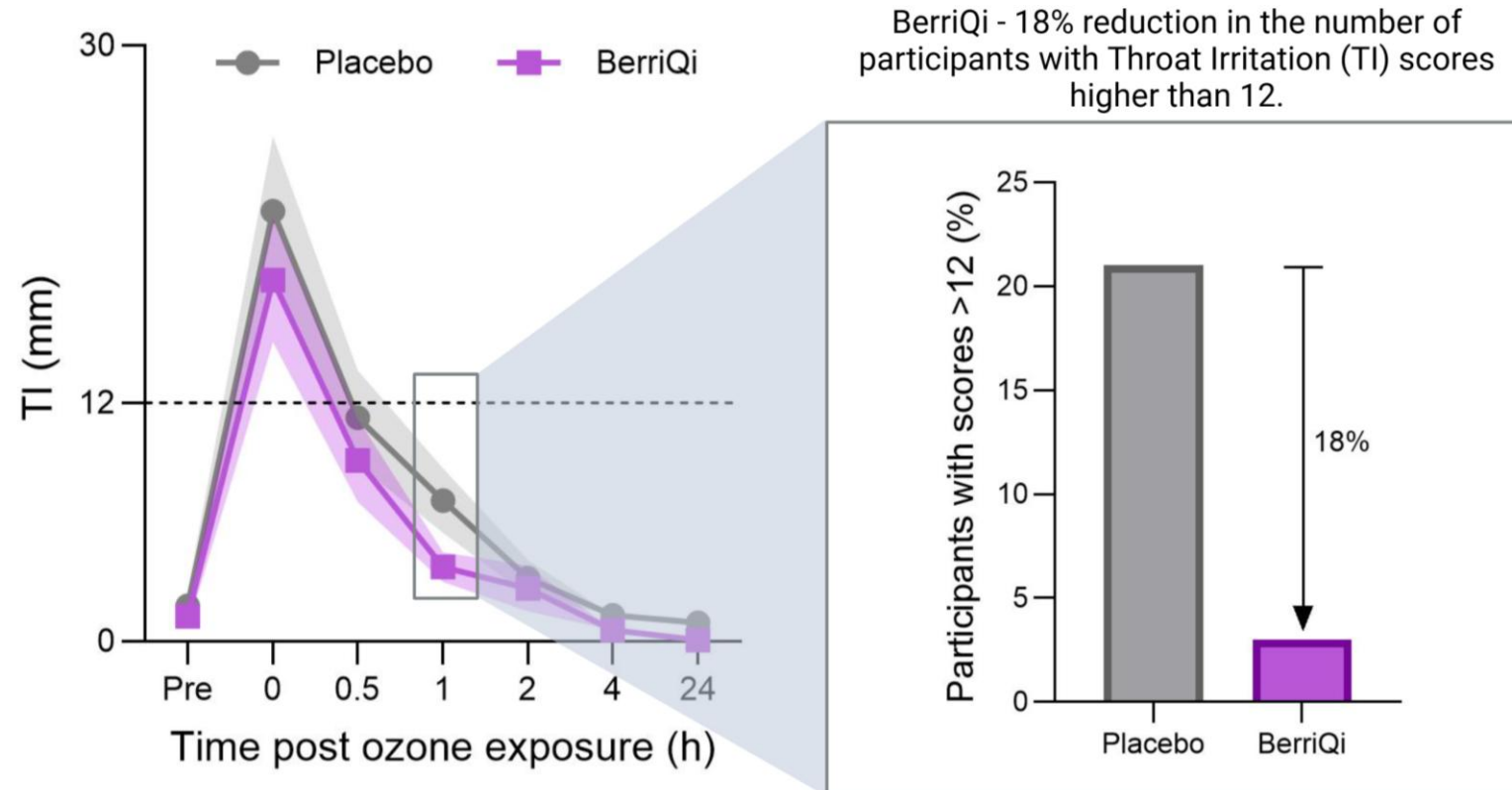


Exposure to 0.2 ppm aggravated respiratory symptoms that dissipated to pre-exposure levels within 24 h.

# Results for Respiratory Symptoms



## Throat Irritation

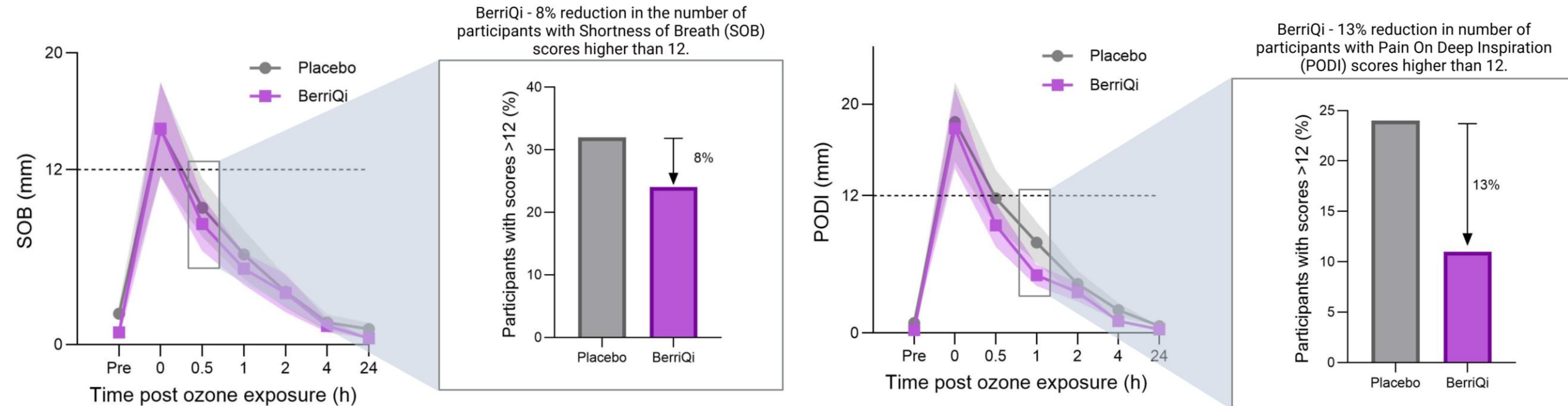


Throat irritation was significantly lower following ozone exposure when participants consumed BerriQi.

# Results for Respiratory Symptoms

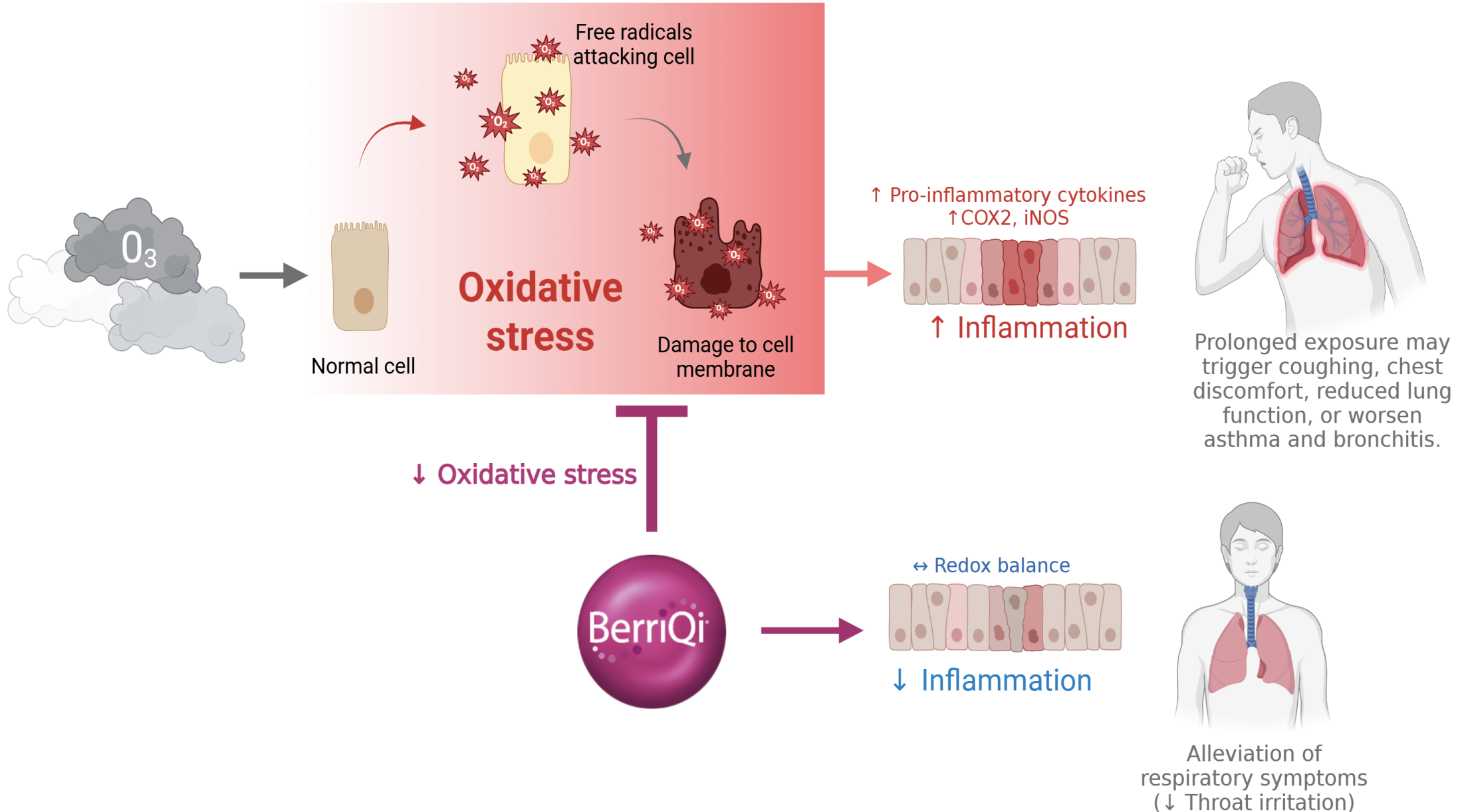


## Shortness of Breath & Pain on Deep Inspiration



Faster resolution of SOB and PODI after ozone exposure in the BerriQi group.

# Oxidative Stress and Throat Irritation



# Key Take Aways : Ozone (Irritant) Study



## BerriQi supplementation

### ✓ **Reduced throat irritation**

Significantly less throat irritation measured compared with placebo.

### ✓ **Faster symptom relief**

More rapid improvement other respiratory irritation symptoms within 1 hour after ozone exposure.

### # **Oxidative balance**

BerriQi supplementation may protect from oxidative stress, reducing respiratory symptoms and inflammation from ozone exposure.



# The Opportunity

## Respiratory Immunity Currently

**Immune  
Activation**  
Crowded Space



**Can exacerbate  
problems and symptoms,  
doesn't address full cycle**

## Respiratory Immunity Future

**Full Cycle Immune  
Activation + Calming**



**Reduce symptoms  
Prevent damage  
Repair damage**

# SUMMARY: BerriQi® provides Full Cycle potent Respiratory Immune support

Specific types of anthocyanins in BerriQi have the unique ability to bind to a receptor activating progression from M1 pro-inflammatory mode to M2 anti-inflammatory mode.



Supports the body's antiviral and anti-bacterial response to pathogens



Reduces lung inflammation



Reduces mucus overproduction



Reduces wheeze, cough and phlegm



Reduces collagen scarring of lung tissue



Supports lung tissue repair



 In collaboration  
Thank you from:



**Bioeconomy  
Science  
Institute™**

