

# A RELIABLE, MORE COMFORTABLE WAY TO SELF SWAB FOR RESPIRATORY VIRUSES



## DESIGNED FOR

- Patient comfort and ease of use
- Reduced anxiety for children and their parents
- Reliable, repeatable sample self-collection
- Use with Rapid Antigen and RT-PCR tests
- Point of care and laboratory settings
- High-yield samples for test accuracy



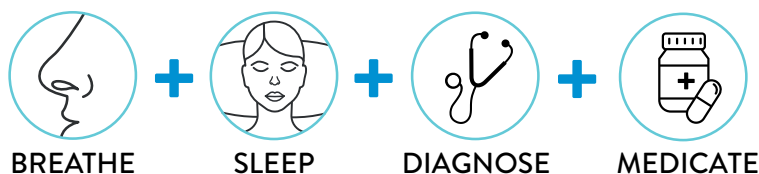
## SUPPORTS

- Compliance with regular testing
- Standardized, consistent sample collection
- Supervised or unsupervised testing
- Healthcare worker safety
- Testing efficiency and accuracy
- Increased willingness to test children regularly



## RHINOMED: A WORLD LEADING DEVELOPER OF NASAL AIRWAY TECHNOLOGY

- Rhinomed is an Australian-based medical technology company that specialises in wearable nasal technology as a novel way to address problems with breathing, sleep and nasal congestion (e.g. due to sleep apnoea, allergy, colds and flu)
- Our existing FDA and TGA registered nasal products have been worn comfortably and safely since 2016, with 1.2 million users registering over 30 million positive user experiences
- We continue to invest in furthering our knowledge of the role played by the nose, upper airways and olfactory system in maintaining health and wellness, with our product pipeline now extending to sampling, diagnostics and nasal drug delivery



## RHINOSWAB: A NEW ERA IN SWAB TECHNOLOGY<sup>1</sup>



### Standard nasal swab

**Variable placement within nose** including anterior nares, mid-turbinate and deep nasal; latter can cause pain, discomfort and sneezing

**Non-anatomical shape and small surface area of 'bud' tip** limits contact area with nasal mucosa and sample yield

**Variable sample collection method** which relies on user skill or training for accuracy and comfort

**Two insertions** required to sample both nostrils and reliant on user skill for accuracy

**Long, flexible shaft** can lead to 'overshooting' and 'brain stab' discomfort as well as unreliable sample collection

**Break-point enables** tip to break off and fit into standard pathology vial

**Pencil grip and head tilt** required to handle and position tapered shaft



### RHINOSWAB

**Sits comfortably** within low-mid nasal turbinates for pain-free sampling

**Anatomically designed 'loop' tip with large surface area** maximizes contact with the nasal mucosa, optimizing sample yield

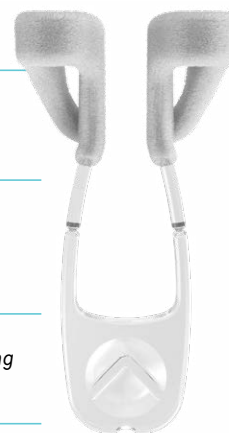
**Standardized sample collection method** which does not rely on user skill or training for accuracy and comfort

**Two-pronged swab** means both nostrils are simultaneously and identically sampled

**Short arms** ensure swab is always positioned at the low-mid turbinates- irrespective of nose size – for reliable sample collection

**Break-point** enables loops to break off and fit into standard pathology vial

**Handle with 'thumb print'** allows for easy, error-free positioning within nose by user for reliable and repeatable sampling method



## SETTING NEW STANDARDS IN SAMPLE COLLECTION

01

### COMFORTABLE & PAIN FREE

Rhinoswab is comfortable to use addressing the problems with current swabs that can be highly invasive, uncomfortable and irritating.

02

### INCREASED TESTING EFFICIENCY

Rhinoswab's easy self-collection, requiring minimal or no supervision, offers greater efficiency in testing at workplaces, clinical settings and anywhere that we need to test frequently and in large numbers.

03

### DUAL NOSTRIL APPLICATION FOR HIGH YIELD

Rhinoswab with its dual swab heads has been shown to capture 1.4 times larger sample than a traditional swab, offering the potential for a more effective diagnostic sample.

04

### SAFER FOR HEALTH CARE WORKERS

Easy self-collection with Rhinoswab reduces the risk to healthcare workers and the cost of PPE required to protect them.

05

### STANDARDIZED SELF COLLECTION

Rhinoswab offers a standardized approach to sample collection which may reduce sampling and testing error.

06

### WORKS WITH BOTH RT-PCR AND RAPID ANTIGEN TESTS

Rhinoswab can be used with both RT-PCR and rapid antigen tests in labs and point of care settings.

## RELIABLE, REPEATABLE SAMPLE COLLECTION IN CLINICAL AND NON-CLINICAL SETTINGS

### CLINICAL SETTINGS

HCW COLLECTED OR SUPERVISED  
SELF COLLECTION



COVID-19 testing clinics



Hospitals



Aged and Residential Care



Primary Care

### NON-CLINICAL SETTINGS

HCW COLLECTED OR SUPERVISED  
SELF COLLECTION



Workplaces



Universities/Colleges/  
Schools



Airports



Home



Events and mass gatherings

## EXPERT OPINION: RHINOSWAB HAS THE POTENTIAL TO INCREASE TESTING EFFICIENCY

*“If a testing facility is set up with multiple collection tables next to each other, with instructions for use on each table, I would estimate that a single healthcare worker can supervise up to 10 people at the same time. This could increase the testing efficiency dramatically.”*

Dr Tim Stobernack, Post-Doctoral Researcher Radboud University Medical Centre

# HIGH EFFICACY AND PERFORMANCE

## RHINOSWAB'S VIRAL LOAD TRANSFER IS COMPARABLE TO SOC

An independent laboratory, Gnomix (Adelaide, Australia, 2021), was engaged to compare the elution efficiency of the Rhinoswab™ compared to the standard of care nasal swab (Copan ESwab™).

The study found that the CT scores for the two swabs were comparable at 20 µL loading for both high and low virus burdens.

	RHINOSWAB	COPAN ESWAB™
<b>High Virus Burden</b> 20 µL (1ml Elution) Average Ct	25.45 (± 0.24)	25.75 (± 0.43)
<b>Low Virus Burden</b> 20 µL (1ml Elution) Average Ct	29.15 (± 0.24)	30.39 (± 1.03)

The study also evaluated the sample yield or average sample recovery for the Rhinoswab compared to the standard of care nasal swab (Copan ESwab™).

	RHINOSWAB	COPAN ESWAB™
<b>High Virus Burden</b> 20 µL (1ml Elution) Average Ct	16.34 µL (82%)	14.50 µL (73%)
<b>Low Virus Burden</b> 20 µL (1ml Elution) Average Ct	21.80 µL (~100%)	17.33 µL (87%)

These results suggest a superior elution efficiency for the Rhinoswab when comparing identical initial loadings of both the high and low virus burden sample.

## SARS-COV-2 DETECTED WITH 100% ACCURACY WHEN RT-PCR TEST APPLIED TO INFECTED RHINOSWAB SAMPLES

A SARS-CoV-2 spiked study was conducted at the Victorian Infectious Diseases Reference Laboratory (VIDRL) at the Peter Doherty Institute for Infection and Immunity.

The study evaluated the efficacy of Rhinoswab in transferring a viral load for testing compared to a commercially available standard flocked swab (Copan ESwab™) using reverse transcription-polymerase chain reaction (RT-PCR).

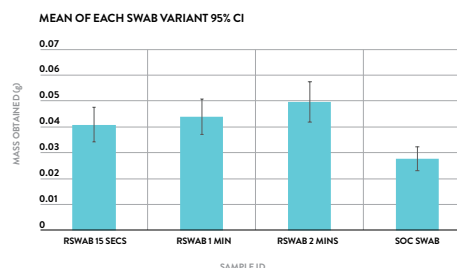
Both Rhinoswab and the Copan ESwab™ reported 100% accurate diagnosis of SARS-CoV-2.

## SUPERIOR SAMPLE CAPTURE

A comparative experiment was undertaken to measure the absorption profile of Rhinoswab when worn in the nose for different time periods (15 seconds, 1 minute and 2 minutes) versus the Copan ESwab™, used as per standard collection protocol of 15 seconds in each nostril.

Fifty study participants, all healthy volunteers of different ages and ethnic backgrounds, self-collected a total of 311 samples at different times during the day using a randomized swab protocol.

When compared to the Copan ESwab™ it was found that Rhinoswab collected a statistically significant (95% CI) greater average sample mass at every sample collection protocol (15 seconds, 1 minute, and 2 minutes).



# DESIGNED FOR ANTIGEN & PCR TESTS

## REPEATABLE, RELIABLE SAMPLE SELF COLLECTION TO OPTIMIZE ANTIGEN TEST ACCURACY



Rhinoswab's standardized sample collection process is pain free and easy to follow.

Rhinoswab's advanced sample capture coupled with its superior elution, optimizes the reliability and accuracy of the test result.

## COMPATIBLE WITH LABORATORY WORKFLOWS & EQUIPMENT



Rhinoswab is compatible with most existing pathology workflows and standard transport media and collection tubes.



In some cases, automated liquid handling equipment require a change of script.

# SUPERIOR USER EXPERIENCE

## SUPERIOR COMFORT AND EASE OF USE DRIVES PREFERENCE FOR RHINOSWAB

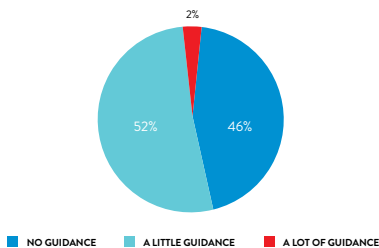
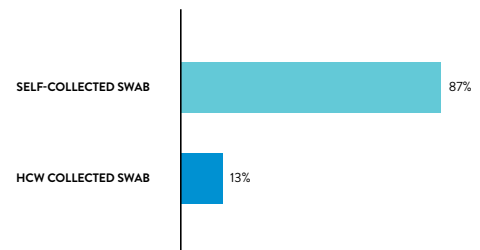
A user experience study was conducted in 2021 by the Canisius Wilhelmina Hospital (CWZ) and the Radboud University Medical Center (Radboudumc) in the Netherlands, with the support of the Municipal Health Authority (GGD Gelderland Zuid) at their COVID-19 mass testing sites.

People were invited to take part in the study after a nasopharyngeal swab sample had been taken by a healthcare worker for covid testing. In total, 556 people agreed to self-test with Rhinoswab and of these 302 participants completed an online survey comparing and providing feedback on their experience with Rhinoswab and the SOC sampling method.

A summary of the study results are shown below.

### RHINOSWAB IS THE PREFERRED SAMPLE COLLECTION METHOD

87% of participants chose Rhinoswab as their preferred sample collection method for future COVID tests.

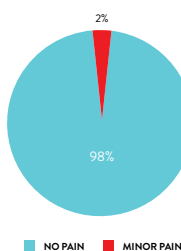
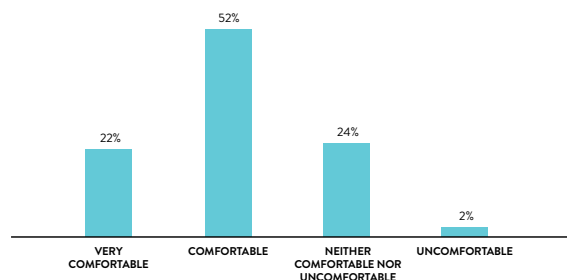


### SELF-COLLECTION WITH RHINOSWAB REQUIRES LITTLE OR NO GUIDANCE FROM HCWs

98% of participants required little or no guidance when from a healthcare worker when using Rhinoswab.

### SELF-COLLECTION WITH RHINOSWAB IS COMFORTABLE

74% of participants found Rhinoswab to be comfortable or very comfortable and only 2% rated it as uncomfortable.



### SELF COLLECTION WITH RHINOSWAB IS PAIN FREE

98% of participants reported they experienced NO DISCOMFORT or PAIN when using Rhinoswab.



# RHINOSWAB JUNIOR

## THE HAPPY WAY TO SWAB CHILDREN

Rhinoswab Junior has been designed to deliver the comfort, reliability and performance of Rhinoswab enhanced by novel features that reduce the fear, anxiety and trauma associated with the use of traditional nasal swabs for children 4-14 years of age.



### SUCCESSFUL CLINICAL TRIAL

Rhinoswab Junior was successfully trialled at the Murdoch Children's Research Institute and Royal Children's Hospital in Melbourne, Australia with 254 participants aged 4-18 years<sup>1</sup>. The full trial results will be published in a peer reviewed journal in 2022.

## DESIGNED FOR CHILDREN



FDA, MHRA & TGA LISTED, CE MARK



EMPOWERS CHILDREN to take their own sample under adult supervision



CLINICALLY VALIDATED<sup>1</sup>, superior self sample collection



LESS INTRUSIVE, more comfortable & pain free



RAPID ANTIGEN and PCR compatible



CHILD FRIENDLY novelty feature adds fun & distraction



REDUCES FEAR AND ANXIETY in children and their parents over testing

## PRODUCT RANGE

There are **four fun designs** to choose from

- Smiley Face Emoji
- Muscle Man Mustache
- Ruby Red Lips
- Cuddly Koala

[rhinomed.global/rhinoswab-junior](https://rhinomed.global/rhinoswab-junior)



<sup>1</sup>Tosif S, Lee L, Nguyen J, Overmars I, Selman C, Grobler A, McMinn A, Waller G, McNab S, Jarvis T, Steer A, Babi F, Daley A, Crawford N, A novel anterior nasal swab to detect respiratory viruses. In: Communicable Diseases & Immunisation Conference 2022; 20-22nd June, Sydney.

## SUPPLY & SPECIFICATIONS

- Rhinoswab and Rhinoswab Junior are available in shipper cartons with 2 bags each containing 500 swabs (Total 1000 swabs)
- Further resources such as technical specifications to support the procurement process are available at [rhinomed.global/rhinoswab](https://rhinomed.global/rhinoswab)
- Pricing available on request

**TO REQUEST SAMPLES OR A  
PRODUCT DEMONSTRATION,  
OR TO MAKE AN ORDER, EMAIL:**  
[swab@rhinomed.global](mailto:swab@rhinomed.global)

**WATCH RHINOSWAB  
JUNIOR IN ACTION**

**CLICK TO PLAY VIDEO ►**



**WATCH RHINOSWAB  
IN ACTION**

**CLICK TO PLAY VIDEO ►**



REV G: 6 September 2022