

# Cytokine Test Strip

## BACKGROUND

In order to understand the role of the immune system in pain, it is essential to monitor the concentration of localized pro-inflammatory cytokine in the spinal cord.

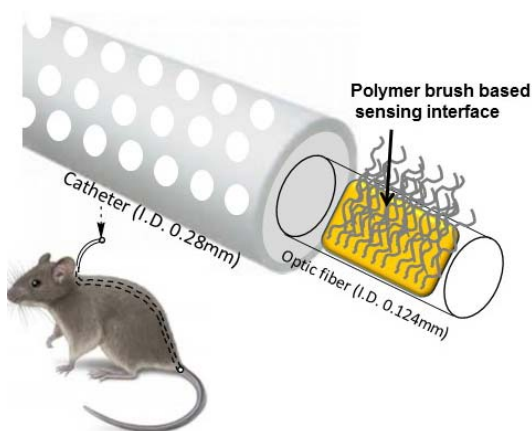
Cytokines are the small proteins secreted from cells. They are indicators of the functional status of the human immune system and the biomarkers for many diseases.

Certain pro-inflammatory cytokines are known to be involved in the process of pathological pain. They can also generate abnormal spontaneous activity from injured nerve fibres or inflamed dorsal root ganglion neurons.

## OUR SOLUTION

We have developed an in vivo device for chemical sensing which can be inserted into an ultrathin catheter and into the body (into the spinal cord or elsewhere into the body). The device allows to detect localised cytokine concentration.

This technology offers the potential to understand the mechanisms underlying pathological pain as well as effective pain therapies and other health conditions. For example, reproductive health could be monitored.



## APPLICATIONS

- ✓ Point-of-care, disposable test strips
- ✓ In vivo diagnostics allow therapeutic drug testing, early disease detection, and sensor technologies for biological and chemical detection
- ✓ Useful to develop or monitor pain therapies
- ✓ For the assessment of reproductive health

## INVENTORS

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## INTELLECTUAL PROPERTY POSITION

Australian Patent Application:  
*Biological detection system*

## WOULD YOU LIKE TO KNOW MORE?

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