

## Press release

Appendiceal pseudomyxoma peritonei (PMP) is an orphan disease that produces an excessive amount of jelly-like material called mucin. It is highly resistant to chemotherapy as the mucin protects tumour cells. Mucin collections are the main cause of morbidity and mortality. Complete cytoreductive surgery and hyperthermic intraperitoneal chemotherapy (CRS/HIPEC) is the standard of care for appendiceal tumours. The intention of CRS/HIPEC is cure. Unfortunately, many patients are unsuitable.

Our drug Bromelain (Br) a pineapple enzyme and N-acetylcysteine (NAC) dissolves appendix PMP mucin of various grades when treated within 3-5 hours. It also has profound effects on other cancers (including colorectal, gastric, liver and pancreatic), and plays an important role in sensitising tumour to chemotherapy agents, therefore increasing efficacy of the treatment regimen.

This novel phase I/II study, the first in human, will examine both the efficacy and safety of a direct injection of the drug into PMP tumour, via radiological guided imaging, in patients that are unsuitable for CRS/HIPEC.

Based on our prior studies and through the support of the NORD (ACPMP) 2016 grant, we have determined a safe and effective drug treatment and concentration. We anticipate that the PMP mucin collections once treated will dissolve and allow the fluid to be aspirated percutaneously. This treatment is likely to improve quality of life and survival with limited intervention, morbidity or side effects, and additionally provide a cost-effective alternative in comparison repeat surgical intervention of palliative intent. We anticipate that a number of patients with inoperable appendiceal PMP will benefit from the outcomes of this clinical study and this new combination drug treatment.

Contact:

Professor David Morris, david.morris@unsw.edu.au