



## Outstanding infertility research base

*Repromed NZ has access to the latest international research*

Repromed's success in assisted conception is supported by an outstanding scientific base and through research affiliations around the world. Scientists within Repromed's dedicated research arm have made major contributions to global knowledge about the causes of and treatments for infertility. The benefit of this research is that new and proven developments are quickly embraced into Repromed's laboratory protocols and clinical programs to ensure couples receive state-of-the-art assessment and treatment for infertility problems. Two of Repromed's current research projects, both of which are in preliminary stages, involve:

- fertility preservation, including egg and embryo freezing; and
- the effects of ageing and lifestyle on eggs.

Fertility preservation of eggs is important for a variety of reasons. The following are examples:

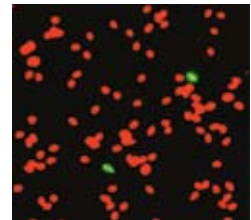
- preserving reproductive potential of young, single women about to undergo fertility threatening cancer treatment;
- facilitating the provision of donated oocytes; and
- allowing the deferral of decisions when male gametes are unavailable.

Repromed's research focus is on improving outcomes for the rapid freezing and thawing of eggs in a process known as vitrification. The contribution of cryopreservation to clinical assisted reproduction is likely to increase in the future. However, it is essential that carefully designed research underpins this contribution so that the most appropriate options are available to patients. The next edition of the Repromed newsletter will report on further developments with these research projects.

## Focus on sperm DNA quality – TUNEL testing

Repromed has experienced an increased demand for TUNEL DNA fragmentation testing over the last year. The test is performed over two days on a fresh sample of sperm and reports the percentage of sperm present in the sample with DNA damage.

Male fertility has traditionally been assessed by sperm concentration, morphology and motility. More recently however, sperm DNA quality has been recognised as an important determinant of male reproductive potential.



High levels of reactive oxygen species (ROS) or "oxidative stress" is associated with poor sperm health in infertile men, affecting up to half of all infertile men. In particular, oxidative stress is believed to influence the integrity of sperm DNA.

Sperm DNA damage can be responsible for failure of conception, impaired embryo development and miscarriage even when IVF-ICSI is used to overcome other aspects of poor sperm health.

Attention has focused on both lifestyle changes and antioxidant therapy to improve sperm DNA health.

Menevit is an antioxidant preparation designed to improve sperm health developed by Dr Kelton Tremellen at Repromed Adelaide. Each capsule contains ingredients including zinc, selenium, vitamin C, folic acid, vitamin E, garlic and lycopene and is taken once a day. In a recent study, which involved a 3 month treatment period, significant improvements in sperm DNA integrity were observed. Menevit has also been shown in a randomized placebo-controlled trial to improve pregnancy rates during IVF-ICSI treatment.

Lifestyle modifications such as ceasing smoking and optimising weight are also recommended.

For more information on TUNEL testing please contact us on Auckland (09) 524 1232 or Christchurch (03) 375 4000.

## Vasectomy reversal

Fertility options following vasectomy include a surgical reversal or IVF/ICSI with surgical sperm retrieval. The decision regarding which option to choose will be based on a number of factors including maternal age, interval from the original vasectomy and whether other fertility factors are present. Repromed NZ offers vasectomy reversal in both Auckland and Christchurch performed by our subspecialist Dr Greg Phillipson. The procedure takes about 2 hours under general anaesthesia and is done as a day stay procedure. Up to 90% of men will regain sperm in the ejaculate with around 50% achieving a pregnancy in the first 12 months.

It is preferred to reverse the vasectomy on both sides. Prior to surgery a blood test can confirm normal hormone levels and physical examination may indicate if there will be a problem to rejoin the cut ends of the vas deferens (vaso-vasostomy). However, until surgery is undertaken the extent of scarring that has occurred following the procedure is unknown. For some men it is not possible to rejoin the vas but instead more difficult procedure (vaso-epididymostomy) is required to join the vas directly to the small tubules of the epididymis.

## Repromed is now paperless!

All Repromed patient notes have now been transferred to our paperless system – RIMS (Repromed Information Management System). The benefits of rapid access to patient results and notes has reduced the response time to inquiries. Laboratory efficiency and quality control improvements have also been achieved.

## Contact us

Our phone numbers remain unchanged:

### Christchurch

03 375 4000 | Free phone 0800 433 784  
PO Box 36560, Christchurch 8146

### Auckland

09 524 1232 | 0800 IVF 105  
105 Remuera Road, Auckland 1050

If you do not wish to receive newsletters or correspondence from Repromed please advise on the above telephone numbers.

### Price changes

There will be some changes to the costs of services provided by Repromed as of the 1st January 2010. Please refer to our website or contact Reception for details.

## New research on male obesity

A new Repromed study of couples undergoing IVF has provided evidence that male obesity is associated with decreased pregnancy rates. The study of 305 couples presenting at Repromed Adelaide's clinic is believed to be the first to confirm that paternal obesity significantly effects pregnancy outcomes. The results of the research were presented at the recent annual scientific meeting of the Fertility Society of Australia in Perth.

Dr Michelle Lane, Repromed Scientific Director said there was extensive evidence that overweight women had difficulty conceiving. Weight loss for those women undergoing assisted conception improves clinical pregnancy rates.

In this pioneering study, couples undergoing IVF at Repromed Adelaide were recruited. The women in the study group were aged less than 38 with the average age of male partners 35. Male BMI was measured prior to treatment with participants classified as normal weight, over weight, obese, and morbidly obese. Andrology scientist Dr Hassan Bakos who presented the results said that 79% of the men in the study group were overweight or obese.

Clinical pregnancy rates were significantly reduced as male BMI increased.

Current studies in our Adelaide laboratory suggest that DNA damage and oxidative stress may be involved. Oxidative stress occurs when the generation of free radicals exceeds the body's own anti-oxidant defence mechanisms, thereby leading to cellular damage.

Dr Bakos said it was important for couples to focus on fertility health through good lifestyle choices, including diet and exercise. "Clearly, these lifestyle choices should not be confined to the female partner when a couple is striving to achieve their dream of having a healthy baby," he added.

## Christmas dates

### CHRISTCHURCH

Repromed will be closed for treatments from Thursday 24th December to Tuesday 5th January.

We encourage you to make contact with the team in the near future to discuss your plans over this period and we will accommodate your needs where possible before our closing dates.

**Whilst we are closed for treatments there will still be staff available on the 29th, 30th and 31st December to take calls for results and cycle bookings for treatments in the New Year.**

### AUCKLAND

Repromed will close from Wednesday 23rd December and will re-open on Monday 11th January.



# AUCKLAND

## Short cycles prove popular

Patient friendly IVF short (antagonist) cycles have proven to be very popular at Repromed with over half of new patients in Auckland undergoing short cycles. Guy Gudex, Repromed Auckland's Medical Director, said that the patient feedback about the antagonist cycles has been very positive, with many fewer patients reporting side effects.

Repromed has been looking at several strategies for reducing the impact of treatment. These include reducing the number of visits for blood testing and scans. The treatment cycle is significantly shorter when using GnRH antagonist and this is an important aspect for patients who prefer fewer drug injections.

GnRH antagonists suppress premature LH surges during ovarian stimulation and cause immediate rapid suppression of gonadotrophin production. They are usually only required for 3 or 4 days.

Two recent meta-analyses both conclude that the risk of OHSS (ovarian hypo stimulation syndrome) was significantly reduced with short antagonist cycles when compared with down regulation long cycles (39% reduction).

Achieving good pregnancy outcomes is of critical importance when choosing a stimulation scheme. The available evidence suggests that the live birth rate following IVF is influenced the most by factors such as health and lifestyle, maternal and paternal age, rather than the type of GnRH analogue used. There is no clinically significant difference between GnRH analogues based on recent research.



The new extension to our Auckland facility was officially opened in May by the Hon Dr Jonathan Coleman, Associate Minister of Health. This new area includes additional clinical space for our nursing team and a new reception.

## FertilityNZ

FertilityNZ provides support, understanding, information and advocacy for New Zealand men and women dealing with fertility problems.

### What does FertilityNZ do?

FertilityNZ provides support and information for people affected by fertility problems through:

- our website [www.fertilitynz.org.nz](http://www.fertilitynz.org.nz)
- regional support groups
- our email address and toll free 0800 number providing ready access for all those seeking information and support
- publishing Pathways Magazine and Regional Newsletter both packed with helpful information – sent out to members

- providing informative Fact Sheet Brochures available for members and through some fertility clinics
- email updates
- holding seminars and workshops
- hosting a regular conference

### How much does it cost to join FertilityNZ?

General information is provided free of charge. Membership is currently free. Members receive our Pathways magazine, fact sheet brochures, email updates, regional groups and a members only area of our website. Membership forms can be found on our website on the registration page. By joining FertilityNZ you support the valuable work FertilityNZ does for all New Zealanders experiencing fertility problems.

## New Hamilton consultation clinic

Repromed NZ is pleased to announce the commencement of a consultation service in Hamilton for couples wanting to discuss their options for investigation and treatment.

Dr Guy Gudex will consult monthly initially. He can assess eligibility for public treatment and refer, if appropriate, as well as discuss private options through our Auckland clinic.

Repromed Auckland also offers regular fertility consulting in Whangarei and Tauranga. For all referrals and appointments please phone (09) 524 1232 or post to PO Box 109 017 Newmarket.

# CHRISTCHURCH

## Donor embryo programme

We have recently contacted all clients on our database who have previously indicated their willingness to donate embryos. These clients have completed their family with the help of IVF and have additional frozen embryos in storage at Repromed. Many have expressed their interest to be involved with our embryo donation programme.

Embryo donation can be the only means of achieving a pregnancy for couples where both partners have significant fertility problems. Each donation requires an application to be submitted to ECART (Ethics Committee on Assisted Reproductive Technology) for approval. Both donors and recipients have medical assessments and individual and joint counselling. Potential recipients are also required to give consent to allow Repromed to obtain any relevant criminal records from the Ministry of Justice which will be viewed by the donors and submitted to ECART as part of the approval process. All ethical applications are submitted with non-identifying information only.

The guidelines for ethical approval can be obtained from ECART at [www.ecart.health.govt.nz](http://www.ecart.health.govt.nz). If you would like more information on this programme please contact Anne Ott, Counsellor, on 375 4000.

## Nelson/Marlborough update

Dr Pete Benny and Katrina Win continue to travel to Nelson every 6 weeks. Katrina is available to all patients on these days for drug education refreshers or if you would like to see someone in person for a chat. If you would like to meet her please contact reception to make an appointment so that she is able to plan her day. Katrina has a clinic laptop computer with her and is able to access your full details and communicate with the team in Christchurch as necessary.

## PGD

PGD is a procedure which enables embryos to be tested for a wide range of genetic disorders. Following successful births, 2009 is proving to be a busy year for the PGD team. We are now finding that we have more patients requiring treatment than we have funding for, so for the first time, we are having to ask publicly-funded patients to wait. At present, funding is available for 6 cycles each year. There is no waiting time for couples who wish to proceed privately. For more information about this service, contact the PGD co-ordinator, Anne Hill, ph (03) 3412 745.

## Waiting list updates

All patients whose names are placed on waiting lists should receive a letter of confirmation from the admin team at Repromed. If you have not received a letter or have any questions regarding your place on any of our waiting lists please contact us. Once your names are on the public funding waiting list we do not routinely make contact other than by newsletter. Patients on waiting lists for donor eggs or sperm will now be contacted every six months.

If you have any questions regarding waiting lists, please contact reception on (03) 375 4000.

## Lifestyle Group

We have just completed our spring Lifestyle Group. A new ten week course will commence in February 2010. If you are interested in improving your fertility through weight loss, improving nutrition and lifestyle factors please contact Elaine or Katrina.

## From the Nursing Team

The nurses can be contacted Monday to Friday between 8 - 5 pm. Please leave a detailed message with your Repromed number if you reach the answerphone. We will endeavour to return your call by the end of the business day. Our after hours telephone number is also available for emergency calls only, please be aware the nurse on call will not have access to your records after hours.