



RHEUMATOLOGY FERTILITY PRESERVATION GUIDELINES

Introduction:

These guidelines have been written to assist your patients in matters of fertility in regards to management of rheumatological conditions. These are a guide only.

Rheumatology patients are at a higher risk of pregnancy complications. They are also at risk of premature ovarian insufficiency (POI) due to:

- Cyclophosphamide treatment – clear evidence
 - It is unclear of the effect of other immunomodulators
- Autoimmune conditions e.g. Possibly reduce anti-mullarian (AMH) hormone in SLE
- Additional implications of delay because of treatment/disease ^(1,2)

It is recommended that in the relevant patient, fertility issues are considered and discussed with the patient and referred or advice obtained from a Fertility Preservation Service (FPS). If in a non-tertiary centre, advice can still be obtained by telephone/Skype so that risks and options for short/medium/long term management can be discussed with you and the patient.

1. **Refer to FPS**
2. **Baseline endocrine assessment including AMH and FSH, and ultrasound if indicated for Antral Follicle Count and exclusion of pathology. The FPS may do this on your behalf.**
3. **Bone mineral density if possible for baseline assessment**
4. **Plans for ongoing FPS follow up.**

OVARIAN PROTECTION WITH GnRH AGONISTS

- Clear evidence of protective effect of GnRH such as goserelin (Zoladex) with alkylating agents ⁽³⁾
- Goserelin is now subsidised through PBS
- Ideally commence 7-10 days prior to commencement of an alkylating agent but anytime better than not
- Goserelin 3.6mg SCI every 28-31 days throughout treatment of the alkylating agent
- Warn patient re risk of potential side-effects such as flushes and other symptoms of hypoestrogenism
- There is no need for additional contraception from the second injection of goserelin onwards
- Ideally given at fertility unit to optimise discussion of symptoms and follow up

FERTILITY PRESERVATION OPTIONS:

- Ovarian tissue cryopreservation if mod-high risk of POI or not enough time for oocyte freezing, and/or
- Ovarian stimulation and oocyte/embryo freezing if time permits

FPS FOLLOW UP

- Ovarian reserve assessment
- Interval FPS if required
- Counselling re ongoing risks of POI and infertility
- Long term follow up essential
- May need to consider egg donation/surrogacy

- Contraceptive advice as required
- Sexual counselling as required

PRE-PREGNANCY CARE

- Need assessment of pregnancy risk, best with high-risk obstetric team
- Need links with appropriate units

MALE FERTILITY PRESERVATION GUIDELINES

- Referral to FPS for discussion
- Semen storage
- May require testicular biopsy
- Need follow up

Victorian links

<https://www.thewomens.org.au/health-professionals/sexual-reproductive-health/reproductive-services-main/fertility-preservation-clinic/>

<https://www.mivf.com.au/fertility-treatment/fertility-preservation>

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- 2) Lawrenz, B., Henes, J., Henes, M., Neunhoeffer, E., Schmalzing, M., Fehm, T. and Kitter, I. (2011). Impact of systemic lupus erythematosus on ovarian reserve in premenopausal women: Evaluation by using anti-Muellerian hormone. *Lupus*, 20(11), pp.1193-1197.
- 3) Somers, E., Marder, W., Christman, G., Ognenovski, V. and McCune, W. (2005). Use of a gonadotropin-releasing hormone analog for protection against premature ovarian failure during cyclophosphamide therapy in women with severe lupus. *Arthritis & Rheumatism*, 52(9), pp.2761-2767.

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The information in this sheet has been obtained from various sources and has been reviewed by the Australian Rheumatology Association. It is intended as an educational aid and does not cover all possible uses, actions, precautions, side effects, or interactions of the medicines mentioned. This information is not intended as medical advice for individual problems nor for making an individual assessment of the risks and benefits of taking a particular medicine. It can be reproduced in its entirety but cannot be altered without permission from the ARA. The NHMRC publication: How to present the evidence for consumers: preparation of consumer publications (2000) was used as a guide in developing this publication.