



## Summary of NICE Guidelines

Title	Assessment and treatment for people with fertility problems
NICE Reference	CG156
Date of Review:	
Date of Publication	February 2013
Summary of Guidance (Max 250 words)	<p><b>Investigations</b></p> <p>Consider fertility investigations in women and their partners who have not conceived after 1 year of unprotected sexual intercourse. Consider earlier referral in women &gt;36 years or with predisposing factors/known cause of infertility.</p> <ul style="list-style-type: none"><li>• Semen analysis using WHO reference values. Repeat ~3 months later if results are abnormal.</li><li>• Measure gonadotrophins if menstrual cycles are irregular.</li><li>• Measure progesterone ~7 days before menstruation to confirm ovulation. Repeat weekly if cycles are prolonged and/or irregular.</li><li>• Measure prolactin in women with an ovulatory disorder, galactorrhoea or pituitary tumour.</li><li>• Measure TFTs if symptomatic of thyroid disease.</li><li>• Assess rubella and <i>Chlamydia trachomatis</i> status.</li><li>• Offer HIV, HBV and HCV testing if undergoing IVF.</li><li>• Check/arrange cervical smear test.</li><li>• Offer imaging where there are no known comorbidities (e.g. pelvic inflammatory disease, previous ectopic pregnancy, endometriosis).</li></ul> <p><u>Ovarian reserve</u></p> <ul style="list-style-type: none"><li>• Likely response to IVF; Low: Antral follicle count <math>\leq 4</math>, AMH <math>\leq 5.4</math> pmol/L or FSH <math>\geq 8.9</math> IU/L High: Antral follicle count <math>\geq 16</math>, AMH <math>\geq 25</math> pmol/L or FSH <math>\leq 4</math> IU/L</li></ul> <p><b>Treatment</b></p> <p><u>Male infertility</u></p> <ul style="list-style-type: none"><li>• Hypogonadotropic hypogonadism - gonadotrophin replacement</li><li>• Obstructive azoospermia - surgery</li></ul> <p><u>Ovulatory disorders</u></p> <ul style="list-style-type: none"><li>• Hypothalamic-pituitary failure – lifestyle advice, pulsatile GnRH/gonadotrophins to induce ovulation.</li><li>• Hypothalamic-pituitary-ovarian failure (e.g. PCOS) – clomifene and/or metformin. Offer ultrasound with clomifene and limit therapy to 6 months. Offer laparoscopic ovarian drilling or gonadotrophins if resistant to clomifene.</li><li>• Hyperprolactinaemic amenorrhoea - dopamine agonist.</li></ul> <p><u>Other</u></p> <ul style="list-style-type: none"><li>• Tubal/uterine dysfunction – surgery.</li></ul>

	<p><u>IVF</u> Offer IVF after 2 years/12 cycles artificial insemination without conception to:</p> <ul style="list-style-type: none"> <li>• Women &lt;40 years</li> <li>• Women &gt;40 years <b>if</b> they have not previously received IVF, there is adequate ovarian reserve, there has been discussion of the implications of IVF and pregnancy at this age.</li> </ul>
Impact on Lab (See below)	<p>■ Moderate</p>
Lab professionals to be made aware	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Laboratory Manager</li> <li><input checked="" type="checkbox"/> Chemical Pathologist</li> <li><input checked="" type="checkbox"/> Clinical Scientist</li> <li><input checked="" type="checkbox"/> Biomedical Scientist</li> </ul>
Please detail the impact of this guideline (Max 150 words)	<p>CG156 updates and replaces NICE clinical guideline 11 ('Fertility'). It is estimated that infertility affects 1 in 7 heterosexual couples in the UK. Since the original guidelines in 2004 there has been a small increase in the prevalence of fertility problems and as such a larger proportion of people are now seeking help for these problems.</p> <p>The main impact of this guideline on the Clinical Biochemistry laboratory is likely to be on the requesting of serum AMH levels. AMH is not part of the test repertoire in many centres and so there may be an effect on send-away tests.</p> <p>Clinical Scientists and Chemical Pathologists should be aware of the initial endocrinological investigations required and how these results will affect further investigations and the treatment pathway.</p>

### **Impact on Lab**

- **None:** This NICE guideline has no impact on the provision of laboratory services
- **Moderate:** This NICE guideline has information that is of relevance to our pathology service and may require review of our current service provision.
- **Important:** This NICE guideline is of direct relevance to our pathology service and will have a direct impact on one or more of the services that we currently offer.