

A Fertility Preservation Service 2007-11

Crans Montana March 2011

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1. Fertility Preservation

Cancer Statistics

- Each year in the UK 285,000 people diagnosed with cancer¹.
- 3.3% of the population cancer survivors².
- Risk of amenorrhoea following chemotherapy varies between 40-68%³.
- Previously very limited fertility preservation options.

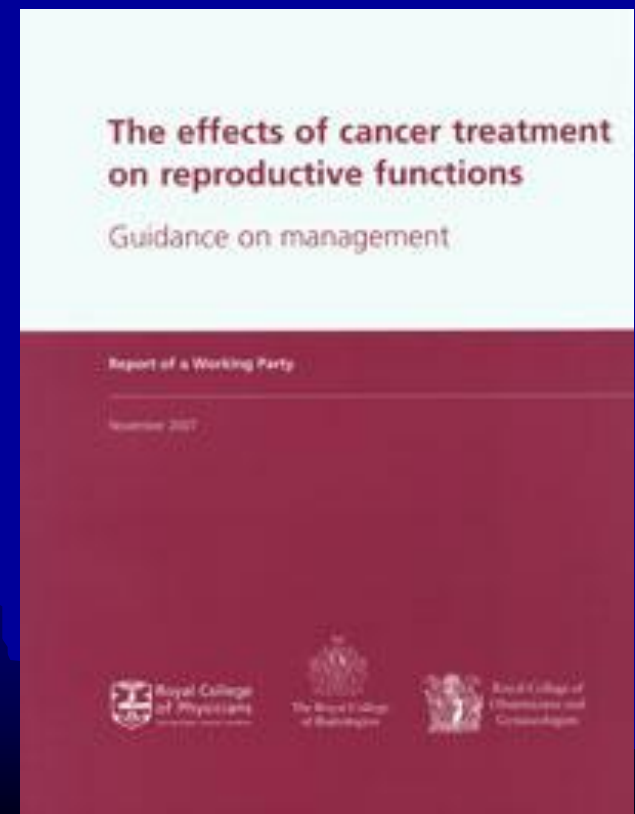
1. Cancer Research UK. CancerStats Key Facts All Cancers

2. Maddams J, Moller H and Devane C. Cancer prevalence in the UK, 2008 Thames Cancer Registry and Macmillan Cancer Support, 2008.

3. Gurgan T, Salman C, Demiroglu A. Pregnancy and assisted reproduction techniques in men and women after cancer treatment. Placenta. 2008 Oct;29 Suppl B:152-9

Provision of information

- Gonadal toxicity: to all with reproductive potential (and younger)
- Consideration of alternate treatment strategies
- Methods to preserve fertility



Chemotherapy and Infertility

- Chemotherapy reduces the number of ovarian follicles and induces ovarian atrophy.
- Increased risk of premature ovarian failure.

Cyclophosphamide

Most gonadotoxic

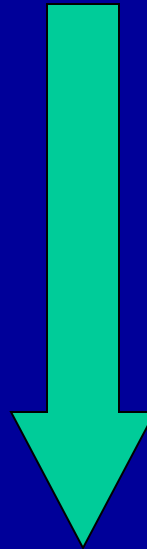
Cisplatin

Bleomycin

Methotrexate

5- fluorouracil

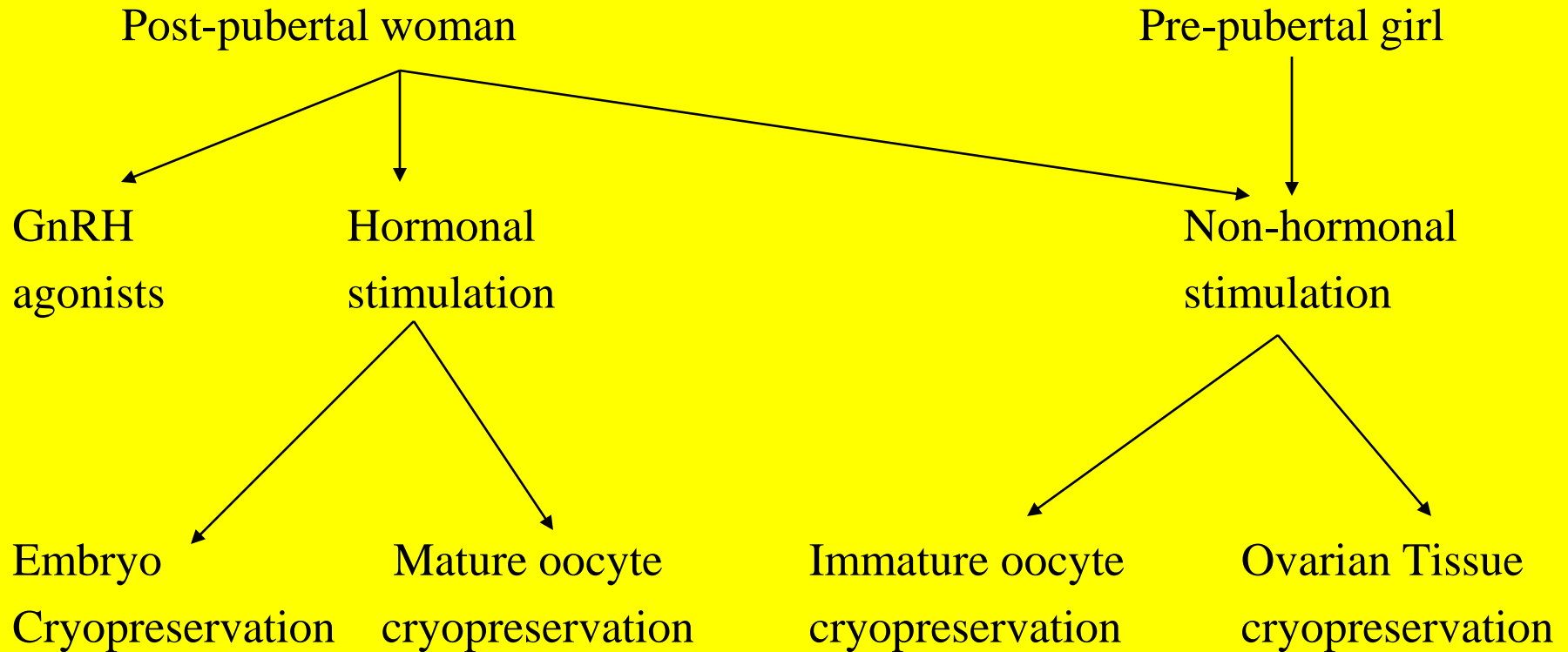
Low risk of ovarian damage



Radiotherapy and Infertility

- Radiotherapy induces primordial degeneration.
- Can transpose ovaries away from direct beam of radiotherapy.
- Damage in proportion to quantity used.
- Associated future risk of miscarriage, premature labour and low birth weight.

Fertility Preservation Options



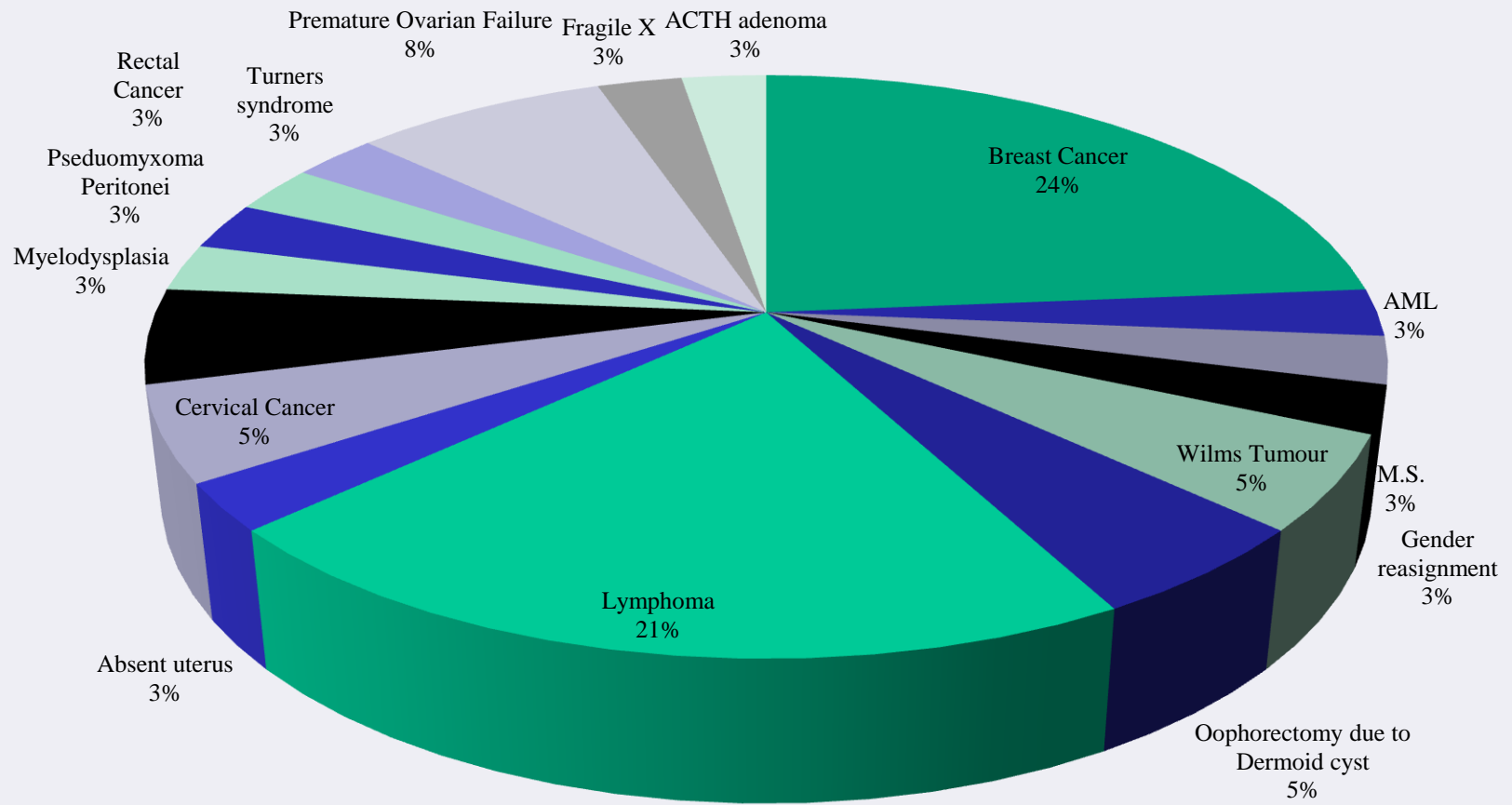
Patient Pathway

- Agreed referral proforma with Mersey & Cheshire Cancer network
- Invited talks: breast, haematology , paediatric groups
- Normal NHS IVF criteria apply
- NHS stops funding storage at woman's 40th birthday
- Patient seen <72 hours
- If single – egg freeze, married /stable- embryo, new 50/50
- Short antagonist protocol
- IFR – independent funding request – to head extra-contractual committee of PCT – if time wait, if not start

Fertility Preservation at Liverpool Women's NHS Foundation Trust

- 31 Patients referred between April 2008-2009
27 of whom (87%) returned for treatment.
Reasons why didn't return: Too ill to undergo treatment, treatment unlikely to be successful and no longer required.
- 38 Patients referred between April 2009-2010
31 of whom (82%) returned for treatment.
Reasons why didn't return: Patients did not want to delay starting chemo, funding refused and likely to be unsuccessful

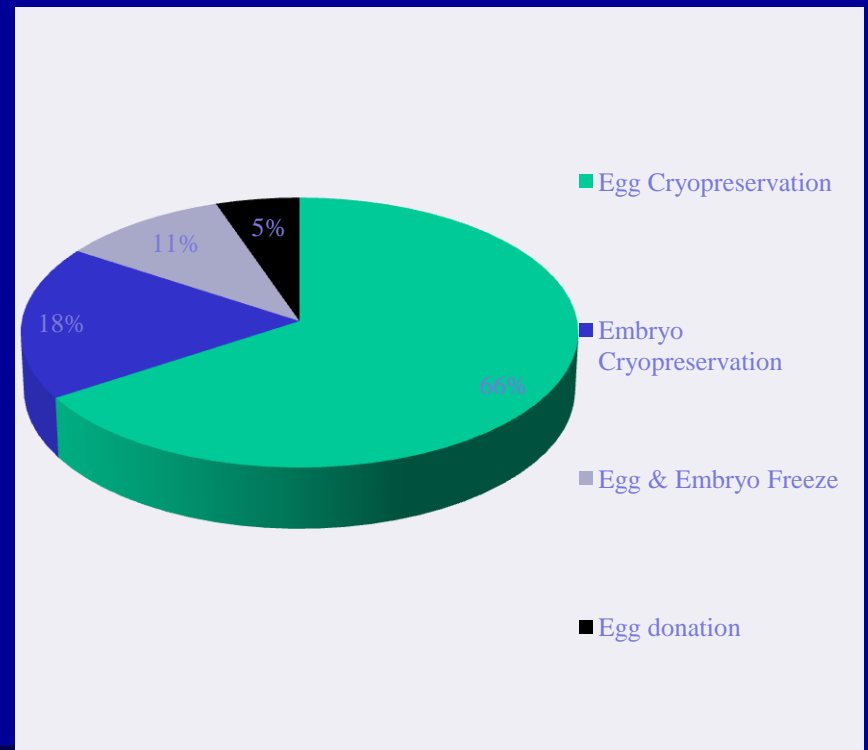
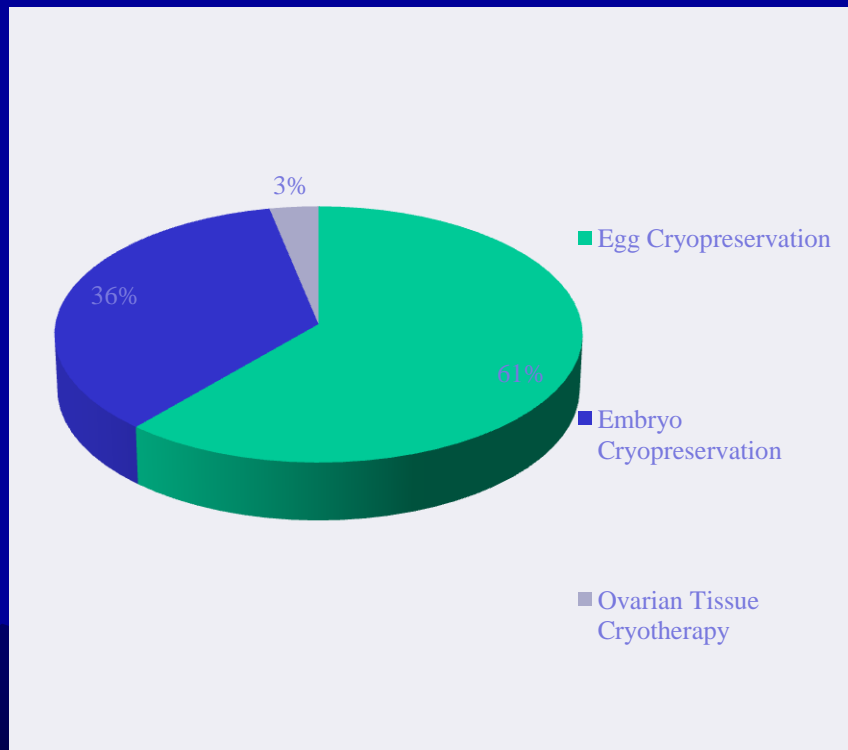
2009-2010 Referral Reasons



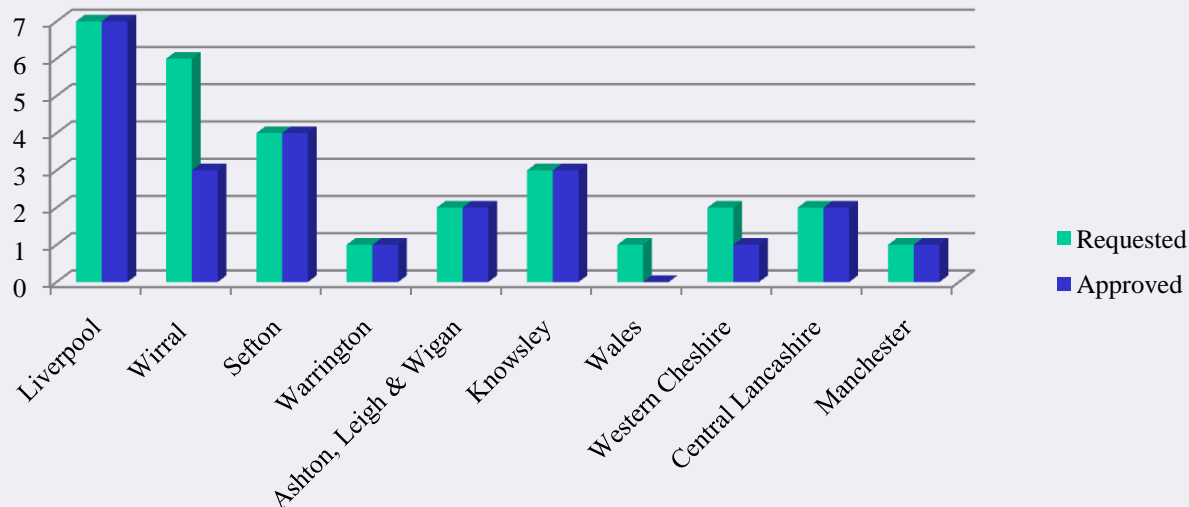
Fertility Preservation at Liverpool Women's NHS Foundation Trust

2008-2009 Treatments

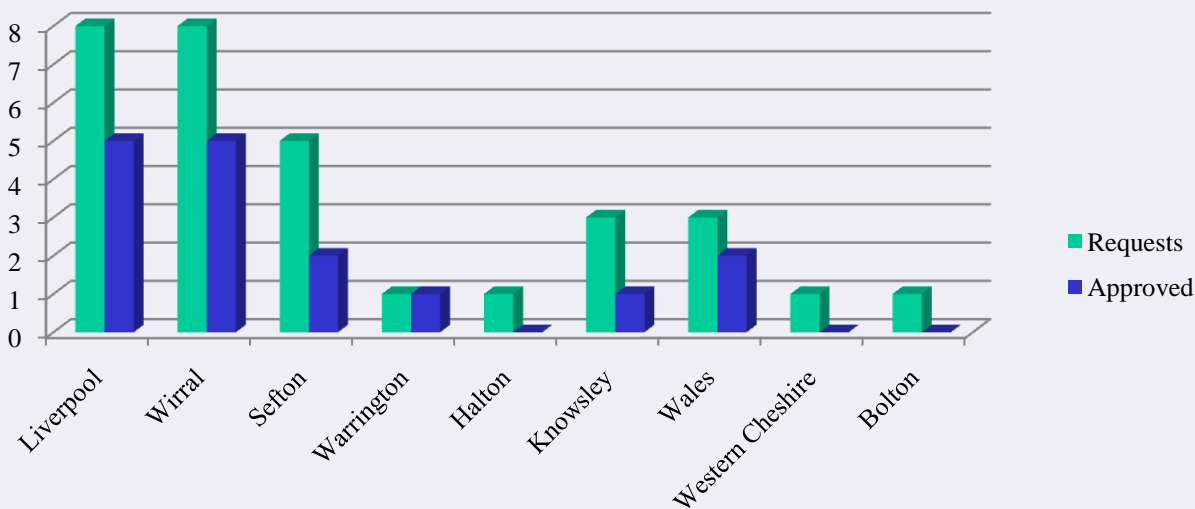
2009-2010 Treatments



Fertility Preservation at Liverpool Women's NHS Foundation Trust



Individual Requests and funding confirmation 2008-2009



Individual Requests and funding confirmation 2009-2010

Funding

- Huge difference in access to fertility preservation throughout the UK.
- Currently at The Liverpool Women's NHS Foundation Trust, apply directly to the PCT for each individual patient.
- Ovarian stimulation cycle costs £2,830, storage is £300 per year and subsequent thaw, ICSI and transfer is an additional £1500.
- NB accumulating charges for storage if 300 per year
- Current annual income about 150kpa new income

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Going forward

- Agreed funding / SLA with PCT's via commissioners
- ESHRE taskforce Bologna Nov 2010, Helen Picton, Leeds
- ?UK group
- Concesus/opinion paper via RCOG/BFS
- Ovarian tissue cryo? Currently not NHS funded
- Luteal phase, clomid/mild, letrozole
- Worthwhile and professionally satisfying