# LHRH ANALOGUES (LHRHa) SUCCESSFULLY SUPPRESS MENSTRUATION DURING CHEMOTHERAPY IN TEENAGERS AND YOUNG ADULTS (TYA)



# Martha Perisoglou, Sujata Edate, Assunta Albanese

The Royal Marsden NHS Foundation Trust, London

### **INTRODUCTION** and **BACKGROUND**

National guidelines on hormonal therapy to defer menstruation in TYA undergoing chemotherapy are currently not available. Clinical indications, formulations and dose are often based on historical practice rather than evidence and there is varied practice around the UK

## **AIM**

To review the use of LHRHa [Leuprorelin (L)] or continuous oral progesterone [Norethisterone (N)] to defer menses in TYA undergoing chemotherapy in a single institution and initiate guidance on its use.

### **METHODS**

### **DATA COLLECTION:**

- Hormonal therapy with L or N over a period of one year.
- Documentation of side effects and breakthrough bleeding
- Documentation of menstrual history (age at menarche, characteristics of cycle, date of last period)
- Status of endometrial thickness on US prior to starting hormonal therapy.

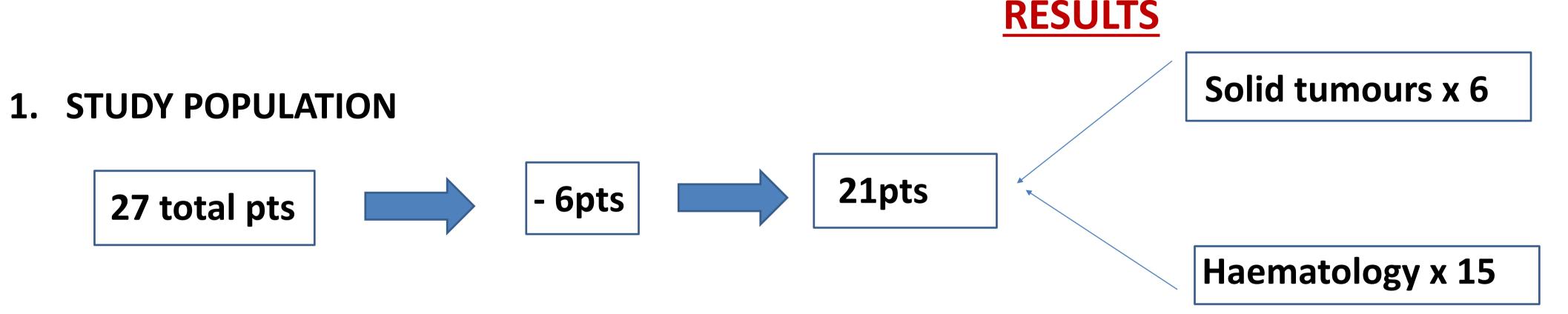
INCLUSION CRITERIA: Post-menarchal TYA undergoing chemotherapy

SIX PATIENTS EXCLUDED FROM THE SURVEY: 1 x Androgen secreting adrenal cortical tumour; 3 x treatment started elsewhere;

1 x ovarian GCT with high HCG; 1 x with progesterone implant already in situ

DATA SOURCES: Drug charts, Pharmacy, Hospital electronic entries

**DATA ANALYSIS:** Descriptive analysis



- 2. MEDIAN AGE: 14 years (10 to 18 years)
- 3. HORMONAL THERAPY:

# Leuprorelin (L)

- >70% of patients (N:15) received L (3.75 mg every 4 wks with Cyproterone Acetate (CA) (50mg BD orally) taken for the first 2 wks if more than 1 wk had elapsed from last period to suppress L-induced initial flare.
- Only 1 patient on L had breakthrough bleeding despite appropriate management.
- No adverse reactions related to L occurred

# Norethisterone (N)

- < 30% of patients (N:6) received N (5mg TDS orally)</li>
- Breakthrough bleeding in patients on N was related to poor absorption.
- No episodes of deep venous thrombosis were associated with N, although 2/6 of patients on N were already on Heparin before starting N.

### **CONCLUSIONS and PROPOSED GUIDELINES**

LHRHa successfully defers menses during chemotherapy.

- Whilst awaiting national guidelines, L remains our first choice treatment at a dose of 3.75mg every 4 weeks SC +/- CA
- Breakthrough bleeding is expected after the 1<sup>st</sup> dose of LHRHa and should be managed symptomatically.
- If breakthrough bleeding occurs after the 2<sup>nd</sup> dose of L, interval between doses should be reduced to 3 weeks.
- If breakthrough bleeding occurs while on 3 weekly regime, then a pelvic US is needed.
- N remains our 2<sup>nd</sup> choice treatment.
- Patients on asparaginase should never receive N.
- Breakthrough bleeding is not expected whilst on N, if it occurs then patient's adherence, decreased absorption and/or drug interaction should be looked for.
- A pelvic US needed if no explanation for breakthrough bleeding is sought.







