**Read Me file**

* Study design is outlined below
* Consort Diagram shows recruitment and number of pregnant and non-pregnant particpants in final dataset.
* Attached excel file
  + Sheet 1 List of column headings
  + Sheet 2 demographic data of participants
  + Sheet blood/plasma analysis data for all time points.

**Overall study design.** FET= frozen embryo transfer, hCG = human chorionic gonaotrophin, LH= luteinising hormone, LMP= last menstrual period. ↑ = blood sampling. Sampling took place at baseline [Visit 1] (mean of 3.4 days prior; range 12 days prior to 1 day post), day of FET [Visit 2] (mean [standard deviation] 2.8 [0.9] days post-LH surge), day 7 post-LH surge [Visit 3], day 10 post-LH surge [Visit 4], day 18 post-LH surge [Visit 5], day 29 post-LH surge {Visit 6] and day 45 post-LH surge {Visit 7].

**Consort diagram** for women recruited to the prospective study of ongoing pregnancy after natural cycle frozen embryo transfer *in vitro* fertilisation treatment.

196

consented

FET natural menstrual cycle

consented

35

withdrawn

3 withdrew consent

7 lost to follow up

25 cycles cancelled or constructed

161

IVF cycles

18

(2 successful on second or later attempt in the study; 16 failed)

repeat attempt cycles

143

unique first attempt IVF cycles

36

successful pregnancy

107

failed pregnancy