

Pregnancy after severe early-onset fetal growth restriction: EVERREST cohort

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Introduction

Pregnancies with severe early-onset FGR (EOFGR) defined as Estimated Fetal Weight <3rd centile often result in extreme preterm birth and associated complications.^{1,2,3,4} After such a pregnancy, parents frequently ask: What is my risk of recurrence?

The EVERREST prospective study characterised a cohort of women with severe early-onset fetal growth restriction (FGR, estimated fetal weight <3rd centile and <600g, 20+0-26+6 weeks of gestation) recruited from 4 sites in UK, Spain, Germany and Sweden. The aim was to characterise affected pregnancies for inclusion in a future clinical trial to assess the safety and efficacy of a new treatment for FGR. Here we analyse the outcomes of subsequent pregnancies after the affected index 'EVERREST' pregnancy.

Method: Retrospective multi-centre review of 135 women recruited to the EVERREST study. Electronic charts & ultrasound software were reviewed and EVERREST participants were contacted to determine the outcome of any subsequent pregnancies after the index "EVERREST" pregnancy. **Results:** Of 135 women recruited to the EVERREST study (2014-2020), 56 subsequently conceived (41.4%, Figure, Table)

Figure: Flow chart of pregnancy outcomes

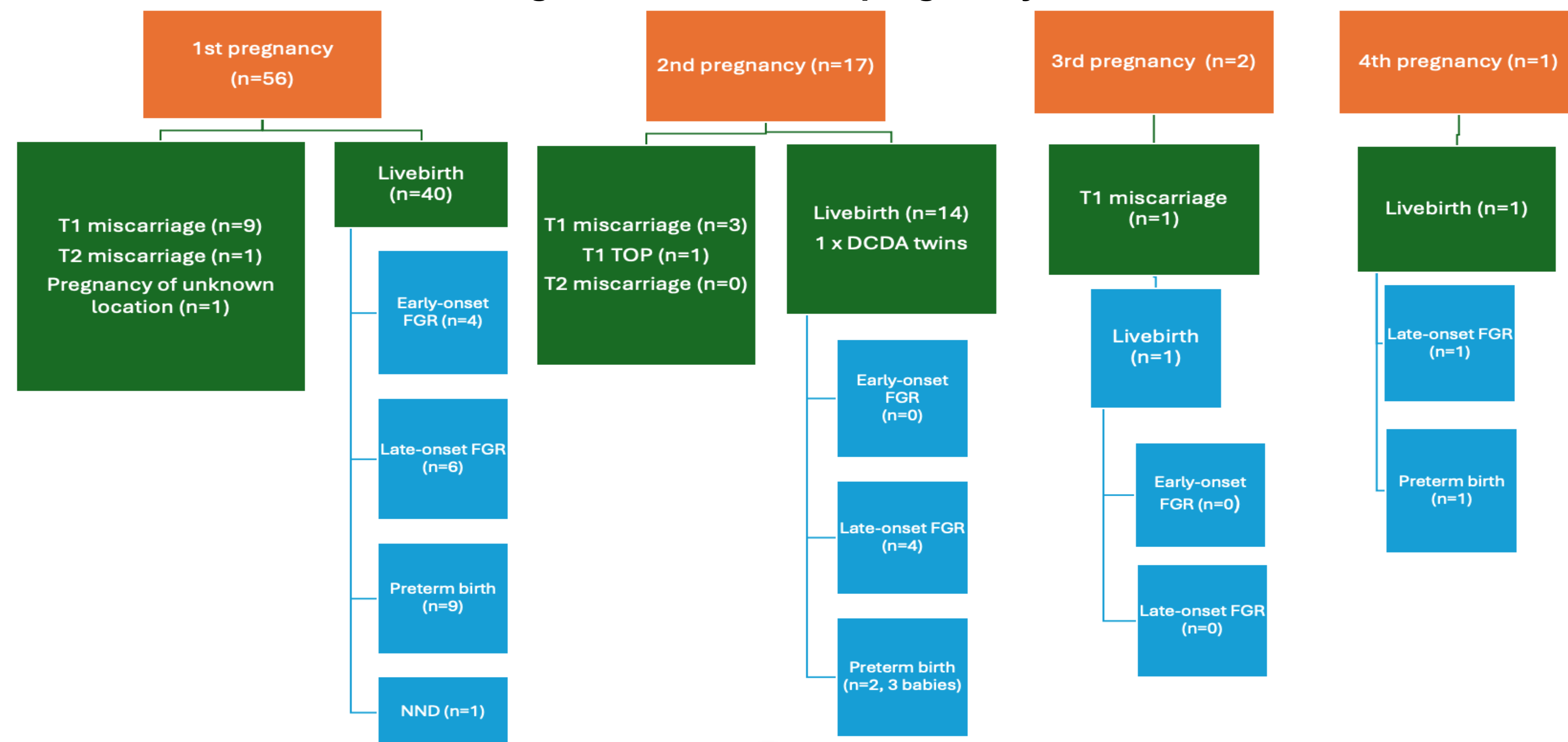


Table: Overall outcomes and complications of pregnancy after an index "EVERREST" pregnancy affected by severe early-onset fetal growth restriction

Pregnancy outcome	All subsequent pregnancies (n=76) (%)
Livebirth	56 (73.6) (twins x 1)
Miscarriage in 1 st trimester	13 (17.1)
Miscarriage in 2 nd trimester	1 (1.3)
Preterm birth	12 (15.7)
Gestational Age at preterm birth (weeks)	
-29-29+6	1 (1.3)
-30-33+6	5 (6.5)
-34-36+6	6 (7.9)
Neonatal death	1 (1.3)
Pre-eclampsia	5 (6.6)
Recurrent early-onset FGR (<32 weeks)	4 (5.2)
Late-onset FGR (≥32 weeks)	11 (14.5)
Postpartum haemorrhage	5 (6.6)
Lost to follow up	3 (3.9)

Treatment:

Thirty-nine patients were prescribed daily low-dose Aspirin 100-150mg (69%).

Five patients were prescribed prophylactic low molecular weight heparin (8.9%).

Conclusion

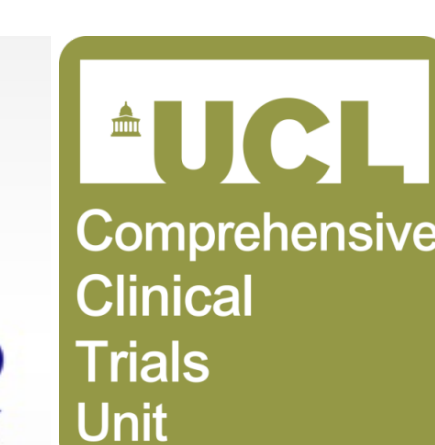
Women who conceived after a pregnancy with severe early-onset fetal growth restriction had favourable outcomes in the next pregnancy with a high chance of live birth and low complication rates.



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<https://www.ucl.ac.uk/womens-health/everrest-project-maternal-gene-therapy>

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