Influence of erythropoietin administration on hemoglobin in an experimental model of artificial placenta (AP) in fetal lamb

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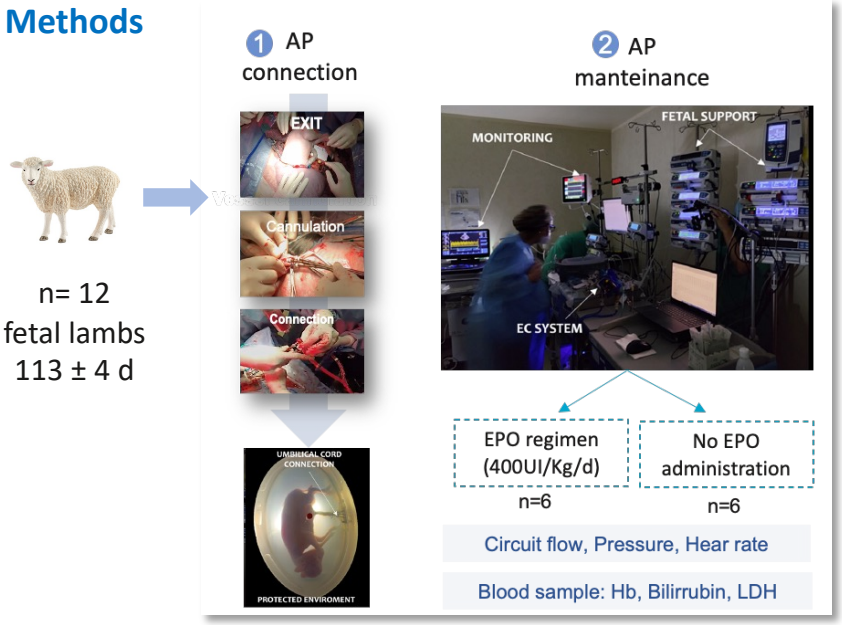
Aim

To explore the effect of erythropoietin (EPO) administration in fetal hemoglobin concentration in an experimental model of artificial placenta (AP) system in fetal lamb.

Methods



n= 12
fetal lambs
113 ± 4 d

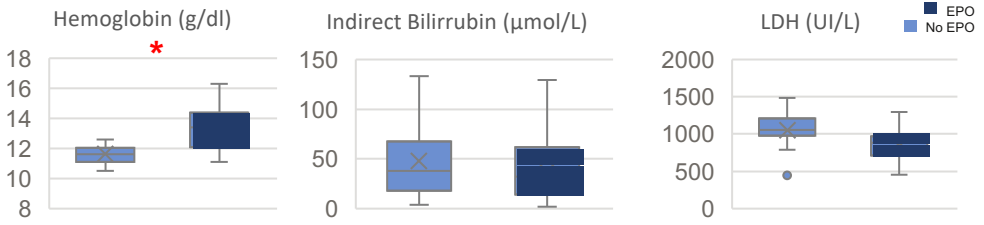
Results:

No differences were observed neither in the survival length nor in the hemodynamic parameters (Table 1). EPO showed a significative increase in Hb with no differences in hemolysis parameters (Fig 1).

Table 1 *(results are expressed as median (sd))*

Variables	EPO (n=6)	No EPO (n=6)	P-Value
Median survival length (h)	72.1 (0.8)	230.3 ± 119.7	n.s.
Circuit flow (ml/kg/min)	175.78 (31.17)	139.9 (41.59)	n.s.
Heart rate (bpm)	178.76 (36.31)	177.3 (67.75)	n.s.
Premembrane saturation	33.04 (15.3)	32.5 (16.38)	n.s.

Figure 1



Conclusions

In fetuses maintained in an AP system, EPO supplementation has a significant positive effect on hemoglobin content.