

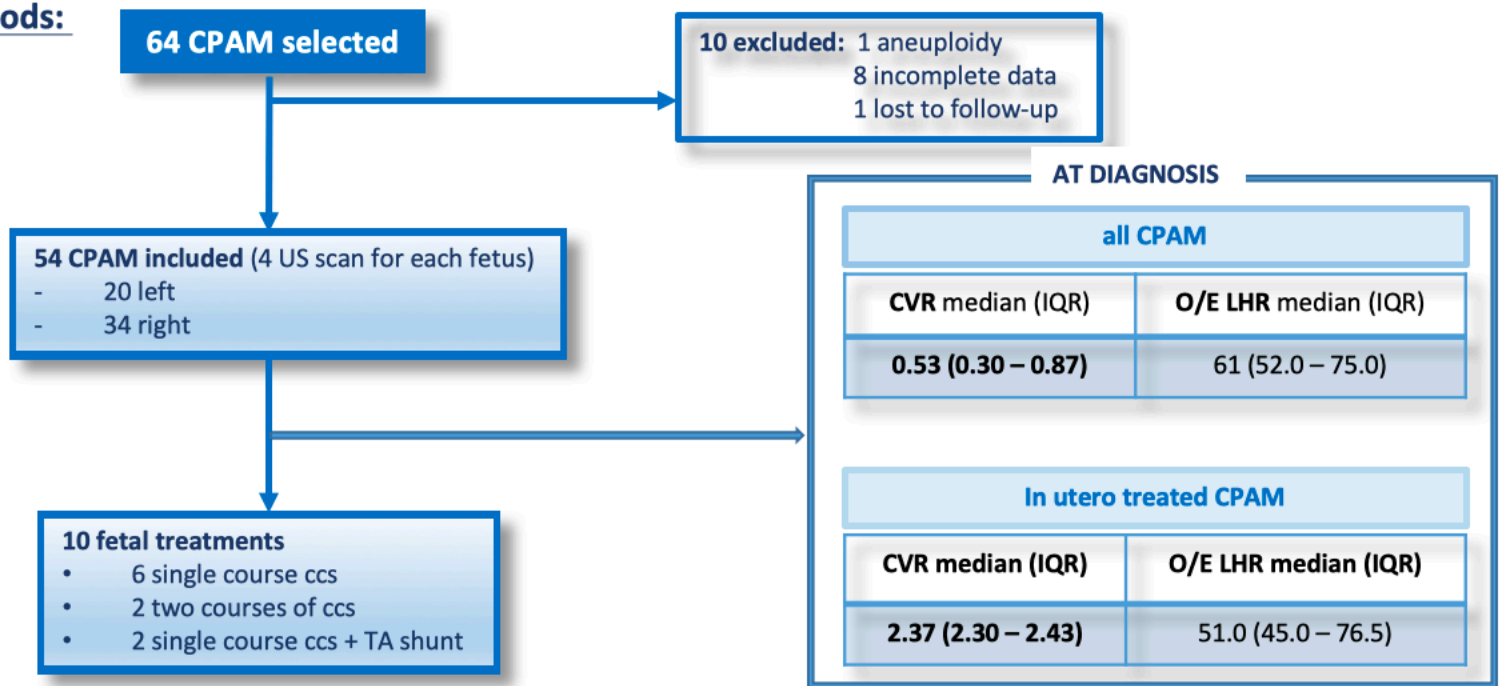
## Prenatal ultrasound characteristics of congenital pulmonary airway malformations and postnatal outcomes: comparison between CVR (Congenital Pulmonary Airway Malformation Volume Ratio) and O/E LHR (Observed/Expected Lung to Head Ratio).

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**Objectives:**

- To verify the feasibility of O/E LHR, as well as CVR, in predicting the risk of adverse fetal outcomes at different gestational ages
- To assess the correlation of O/E LHR and CVR with postnatal outcome.

**Methods:**



**Fetal decompensation = hydrops, need of steroids, in utero surgery**

**Results:**

	CVR					O/E LHR				
	Cut-off at diagnosis	AUC	p-value	Sn (%)	Sp (%)	Cut-off at diagnosis	AUC	p-value	Sn (%)	Sp (%)
Fetal decompensation	> 1.08	0.880	< 0.001	70.00	82.35	≤ 61.0	0.754	0.004	100.00	56.10
Fetal hydrops	> 2.23	0.980	< 0.001	100.00	98.04	≤ 61.0	0.533	0.666	100.00	50.00
Apparent in-utero resolution	> 0.69	0.524	0.803	53.85	57.50	≤ 53.0	0.592	0.400	54.55	70.27
Fetal therapy	> 2.23	0.980	< 0.001	100.00	98.00	≤ 61.0	0.522	0.771	100.00	48.89
Preterm birth	≤ 0.28	0.584	0.694	50.00	81.63	≤ 59.3	0.713	0.033	100.00	56.82
Respiratory support at birth	> 0.90	0.689	0.118	66.67	84.37	≤ 63.0	0.549	0.675	85.71	46.34
Postnatal surgical treatment	> 0.81	0.623	0.168	38.46	85.71	> 69.4	0.580	0.425	35.14	90.91

**Conclusions:**

**CVR**

- Significantly predict the risk of fetal decompensation and the need for prenatal intervention with higher specificity.
- It seems not to predict obstetric outcome.

**O/E LHR**

- Could be use to rule out the risk of fetal decompensation with higher sensitivity but with a lower specificity.