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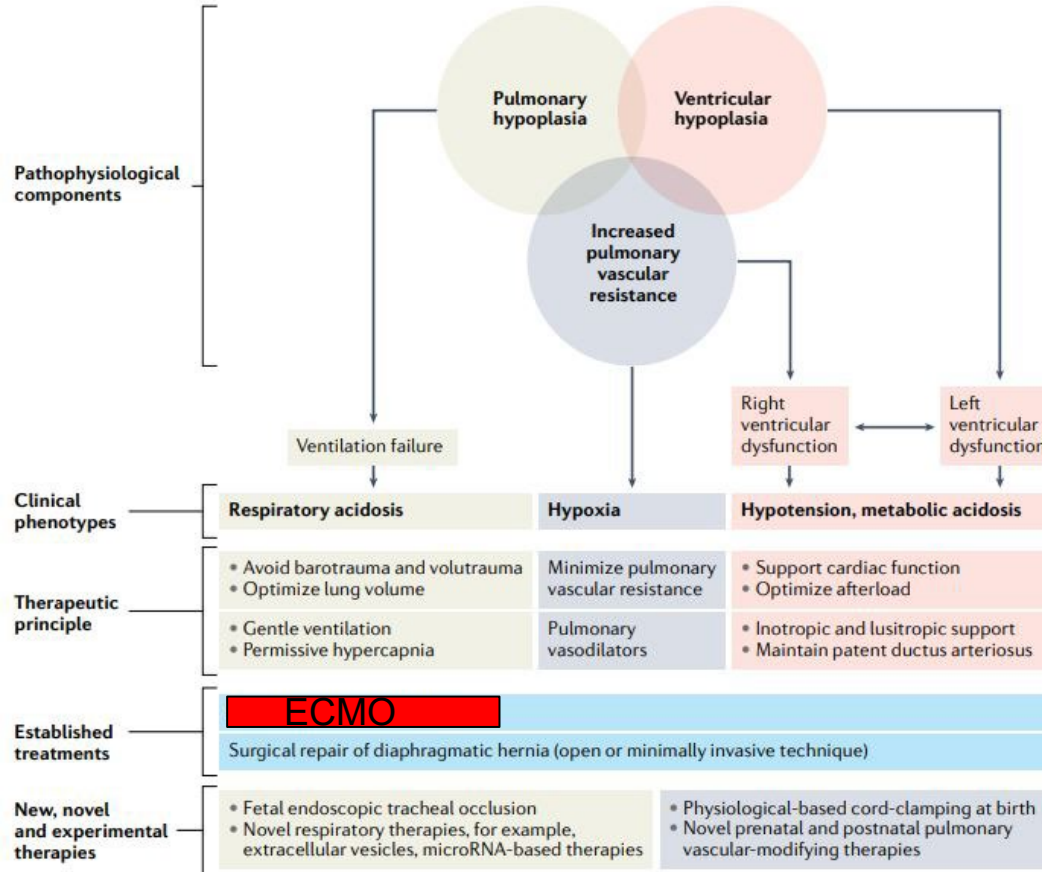
# Interdisciplinary Solutions for CDH in Germany

## Efforts of the Neonatologist

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Clinic for Neonatology  
University Medicine Mannheim

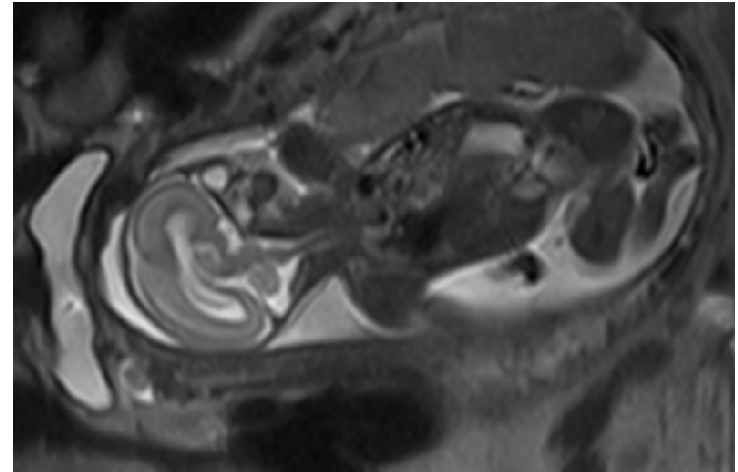
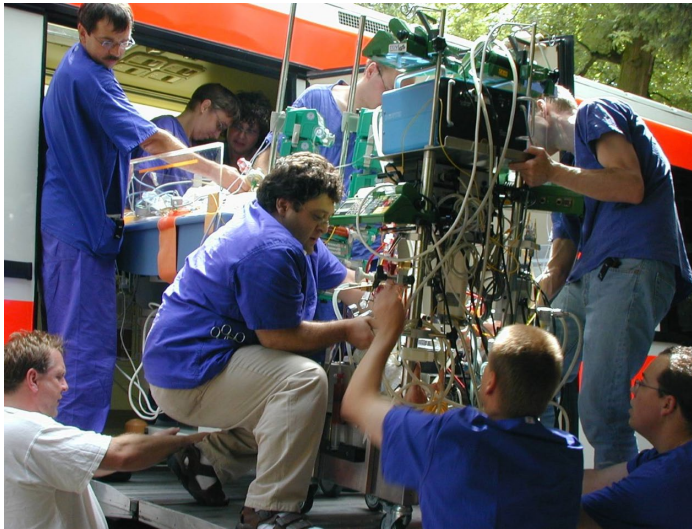
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# CDH - a challenging disease (250 cases per year in Germany)



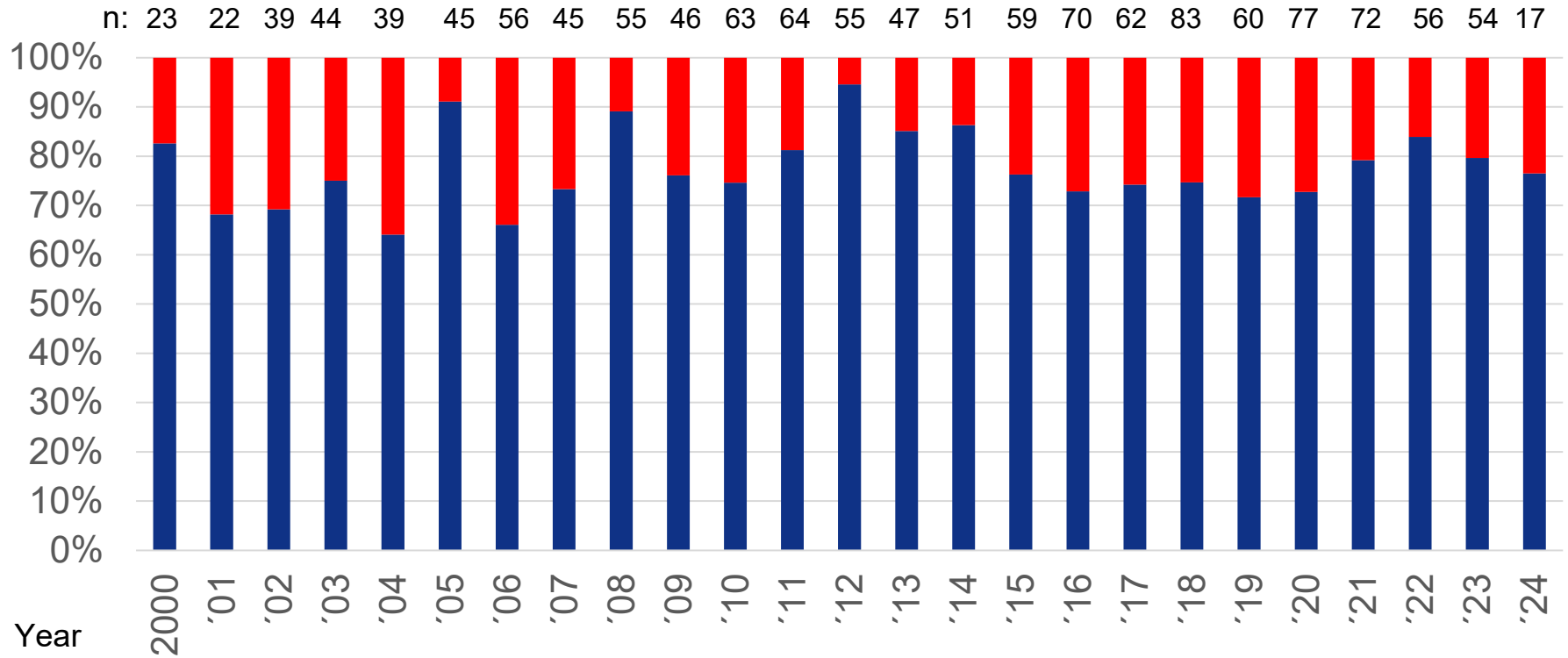
# ECMO: main marketing strategy for CDH treatment in Mannheim

Transfer with ECMO to our center  
back in 2000: only 20 % prenatal  
diagnosed CDH



„Transport“ today: 90% prenatal  
diagnosed CDH

# Number and Survival Rate CDH-Patients Mannheim per Year: n = 1304



# Accurate prenatal diagnosis (mild/moderate/severe) n= 180 LCDH by MRI (GA 24-32) in Mannheim 2015-22

severe	MRI o/e LHR 15-25%, n=22 LCDH			rFLV 15-25%, n=44 LCDH			
	ECMO	CLD	Survival	ECMO	CLD	Survival	
	16 (73)	12 (55)	11 (50)	29 (66)	23 (52)	26 (59)	n.S
							4 FETO
moderate	MRI o/e LHR 25-35%, n=52 LCDH			rFLV 25-35%, n=65 LCDH			
	ECMO	CLD	Survival	ECMO	CLD	Survival	
	29 (56)	30 (58)	33 (64)	34 (52)	37 (57)	44 (68)	n.S
mild	MRI o/e LHR > 35%, n=106 LCDH			rFLV > 35%, n=68 LCDH			
	ECMO	CLD	Survival	ECMO	CLD	Survival	
	31 (29)	41 (39)	92 (87)	14 (20.0)	22 (32)	68 (100)	p<0.05



# Defining key factors in therapy of CDH

1. Accurate prenatal diagnosis
2. Standardized and experienced perinatal care
3. Protective ventilation of the hypoplastic lung
4. Management of pulmonary hypertension
- 5. Usage of ECMO in selected cases (40% of cases)**
6. Timing and technique of surgical therapy
7. Structured follow-up

## **Standardized Postnatal Management of Infants with Congenital Diaphragmatic Hernia in Europe: The CDH EURO Consortium Consensus – 2015 Update**

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Thomas Schaible<sup>g</sup> Arno van Heijst<sup>b</sup> Dick Tibboel<sup>a</sup> for the CDH EURO Consortium



# Interdisciplinary prenatal counseling of the parents

First suspected diagnosis by organ screening 18-24 weeks (**Gynaecology**)

**Neonatology:** first contact enhanced by online information (ECMO for selected cases)

MRI by specialized center 24-32 weeks (**Pediatric Radiology**)

**Neonatology and Pediatric Surgery:** detailed information after accurate diagnosis including other malformations and results from genetic testing. Offering FETO in severe cases (**Fetal Surgery**).

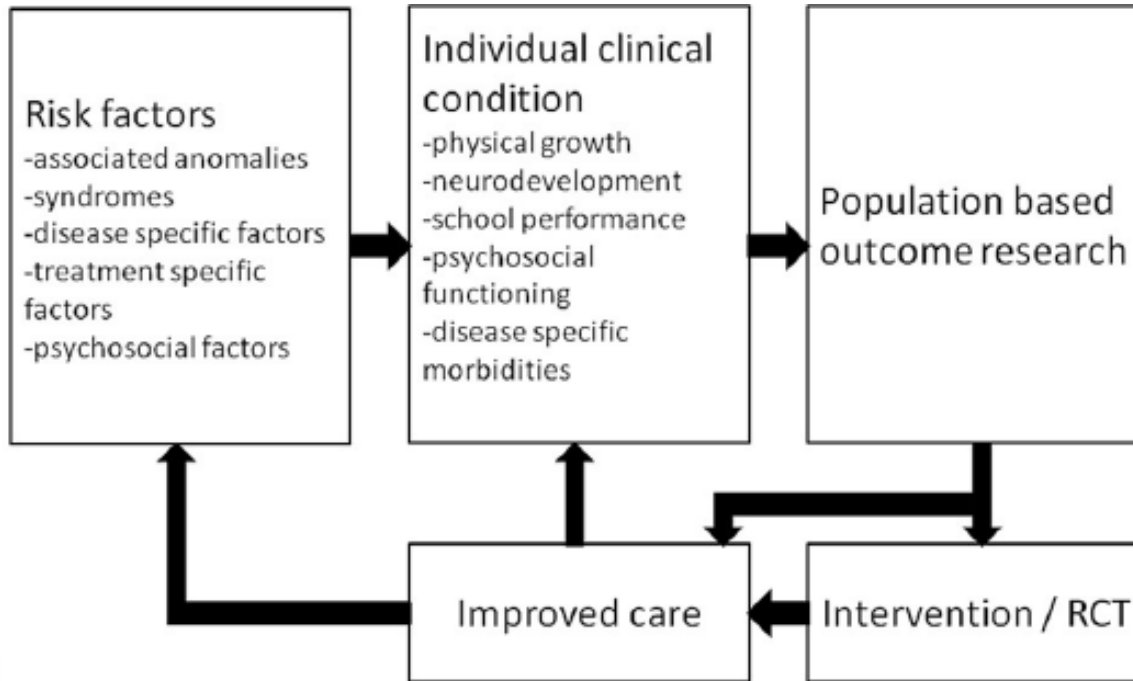
Birth planning (mode of delivery and management of polyhydramnion)  
32-34 weeks (**Obstetrics**)

Physiological based cord clamping (**Obstetrics and Neonatology**)



# Schematic representation of a standardized multidisciplinary approach to optimize care.

Sem Pediatr Surg, Vol 26, IJsselstijn H et al.





# Compromized lung function in adult CDH patients

(Spoel M. Pediatr Pulmol 2012)

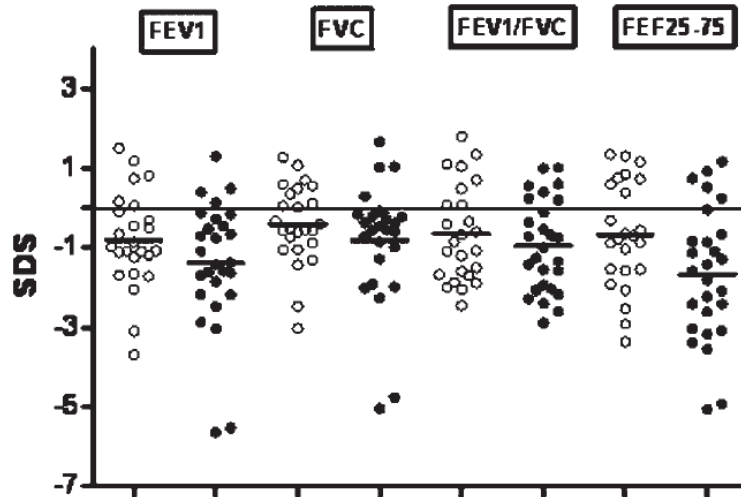


Fig. 1. CDH patients: Spirometric values (SDS) after broncho-dilation. Open circles represent values in childhood, closed circles represent adult values. Bars per panel indicate mean value.

But:  
learning  
from the  
best  
results



Rodriguez R FC Turin

# Thank you for your attention

