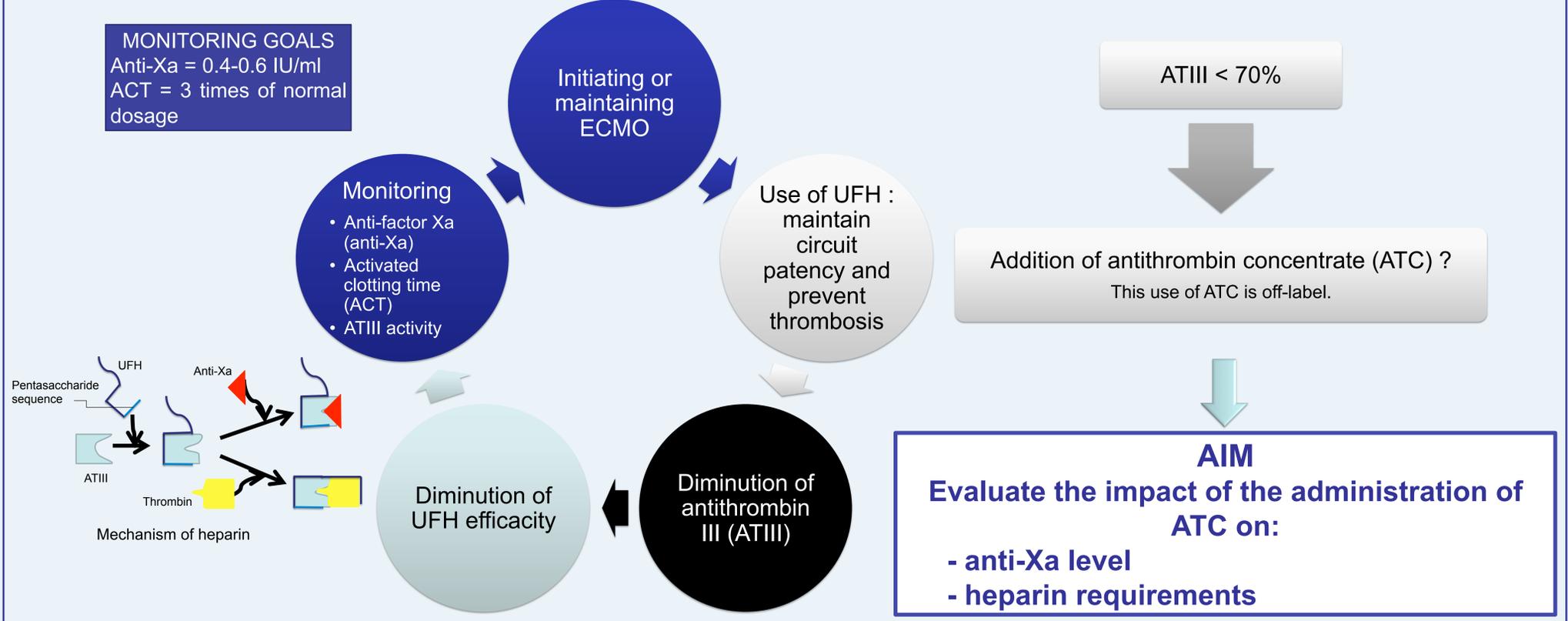


## OBJECTIVES

During extracorporeal membrane oxygenation (ECMO), the risk of thrombosis is important due to the non biological surfaces of the circuit.



## STUDY DESIGN

### Retrospective study :

- all patients supporting ECMO in 2015
- at least one administration of ATC

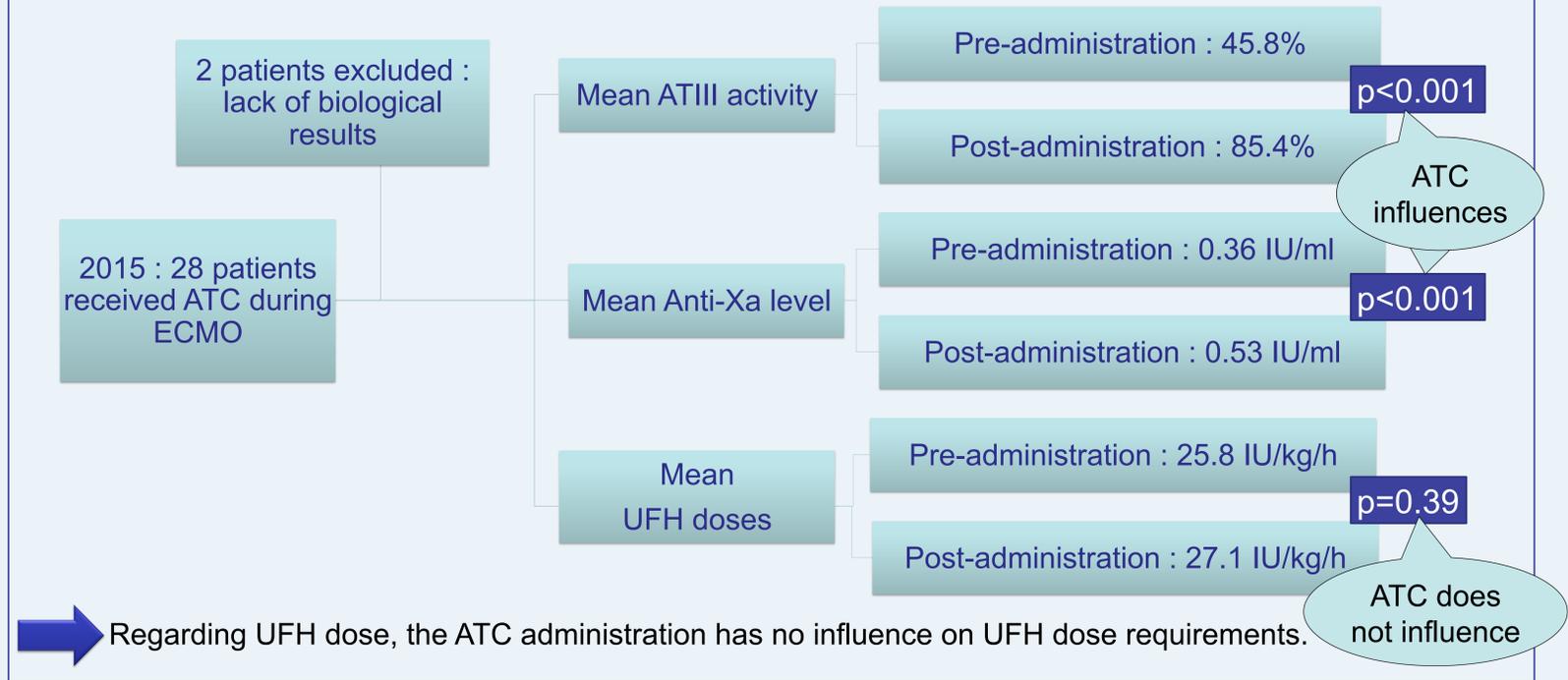
### Collected :

- ATIII activity levels
- Anti-Xa levels
- UFH dose

### Compared :

before and after ATC administration (Student test).

## RESULTS



➔ Regarding UFH dose, the ATC administration has no influence on UFH dose requirements.

## DISCUSSION

In some studies, administration of ATC decreased UFH dose requirements and in other studies no difference was found in heparin infusion rate.

	Pré ATIII	Post ATIII	
<b>Ryerson et al. (2014) : Pediatr Crit Care Med</b>			
UFH Dose (IU/kg/h)	28	19	p < 0.001
<b>Wong et al. (2015) : Pediatr Crit Care Med</b>			
UFH Dose (IU/kg/h)	42.7	32.6	p < 0.001
<b>Byrnes et al. (2014) : ASAIO Journal</b>			
UFH Dose (IU/kg/h)	30.4	31	p = 0.245
<b>Niebler et al (2011) : Artificial Organs.</b>			
UFH Dose (IU/kg/h)	26	24	p < 0.0001

## CONCLUSION

ECMO is a common procedure associate with an off-label use of ATC. In this study, ATIII levels and anti-Xa levels increase significantly after ATC administration but the UFH doses were not changed after ATC. This study could enable us to review our anticoagulation protocol during ECMO particular by decreasing UFH requirement. Future prospective studies are warranted to evaluate the benefits of antithrombin replacement.