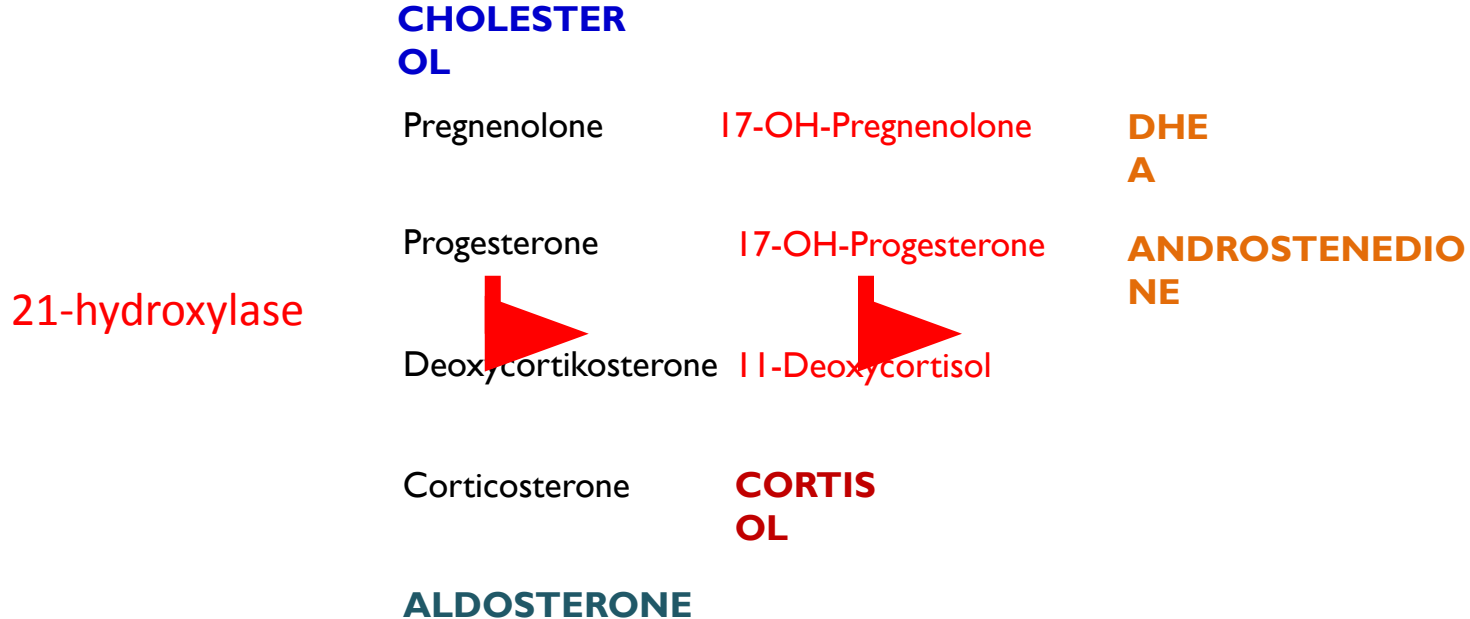




Premature ovarian insufficiency

Olle Kämpe

21-hydroxylase autoantibodies



Winqvist, Karlsson, Kämpe Lancet 1992



Autoimmune premature ovarian insufficiency

side-chain
cleavage enzyme

CHOLESTEROL

Pregnenolone

17-OH-Pregnenolone

DHEA

Progesterone

17-OH-Progesterone

ANDROSTENEDIONE

Deoxycorticosterone | 11-Deoxycortisol

Corticosterone

CORTISOL

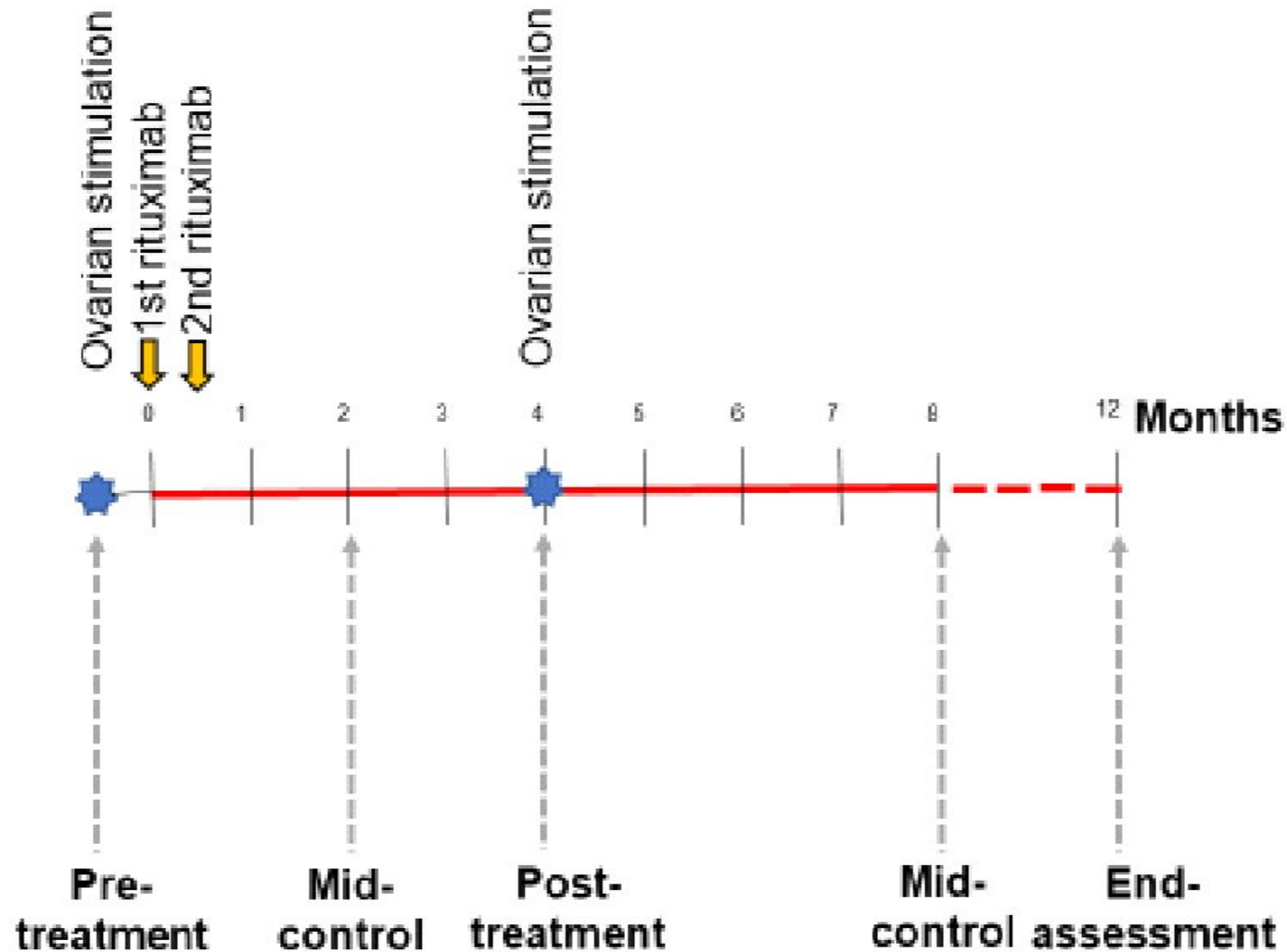
ALDOSTERONE



Husebye ES, Anderson MS, Kämpe O, NEJM 2018

APS1

Immunotherapy for premature ovarian insufficiency



	Age at POI diagnosis	Age at inclusion	1st ovarian hyperstimulation	2nd ovarian hyperstimulation
Addison, POI, Alopecia	30	34	No response	Egg retrieval with 13 unfertilized eggs for cryopreservation
Addison, POI, T1 diabetes, celiac disease thyroiditis	26	34	No response	Egg retrieval with 1 mature and 2 immature oocytes for preservation
Addison, POI, Alopecia	13	31	No response	Egg retrieval with 10 unfertilized eggs for cryopreservation
Addison, POI	16	32	No response	Single follicle bilaterally
Addison, POI	23	24	No response	Egg retrieval with 6 unfertilized eggs for cryopreservation and embryo cryopreserv
POI 21-OH pos SCC pos	29	29	No response	Egg retrieval with 8 unfertilized eggs for cryopreservation and embryo cryopreserv
Addison, POI	30	30	No response	Not yet completed

Summary

None of the 7 Addison patients patients responded to ovarian stimulation prior to rituximab treatment.

5 of 7 patients responded with spontaneous menstrual bleedings.

In 5 women mature eggs were harvested, 3 for oocyte cryopreservation and 2 for embryo preservation.

Questions

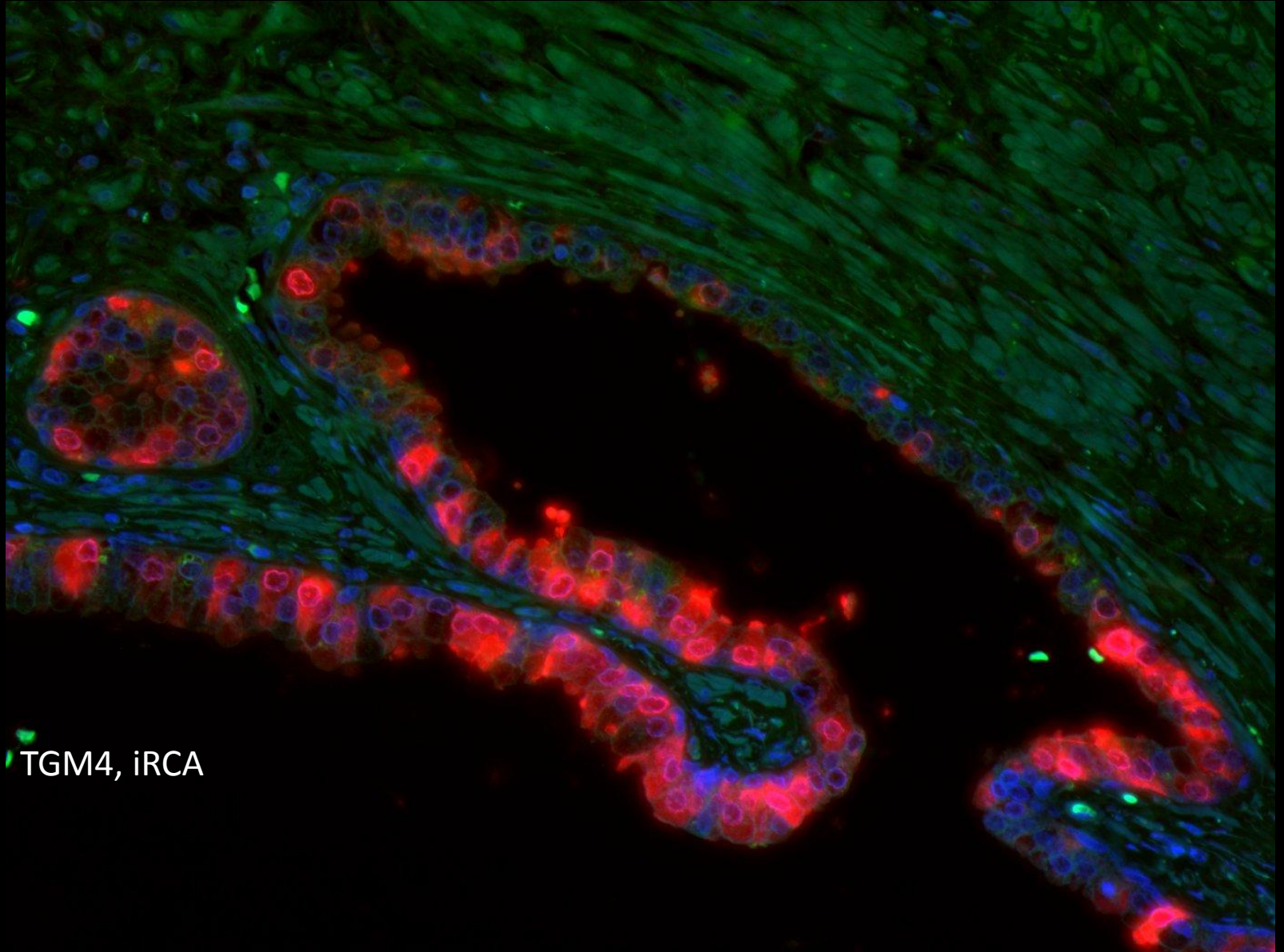
- Early oocyte (ovarian) cryopreservation for all female APS-1 patients?
- Will Rituximab work for APS-1 patients with POI?
- Early sperm cryopreservation for all APS-1 patients?



Development of TGM4 antibodies in male APS-1 patients

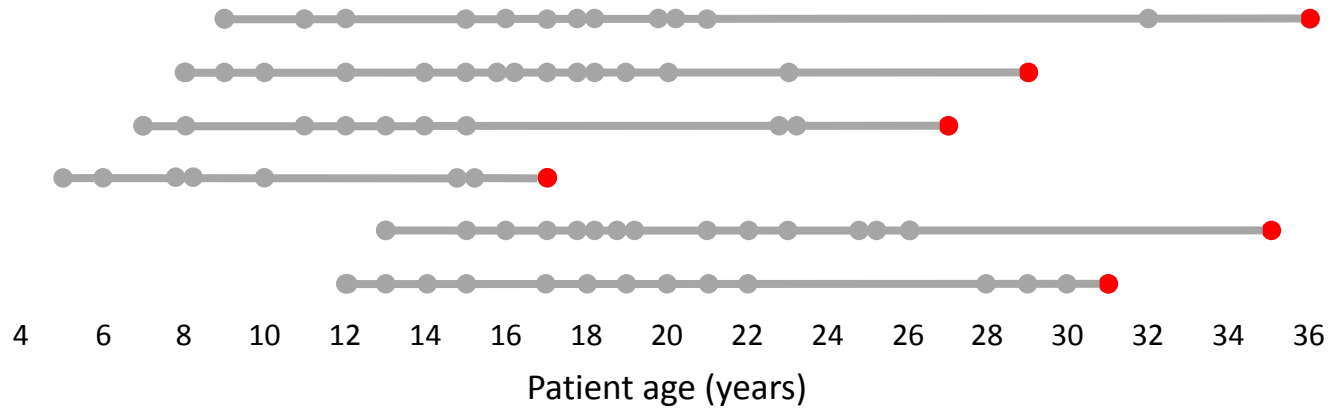


Antibodies against Prostate in male

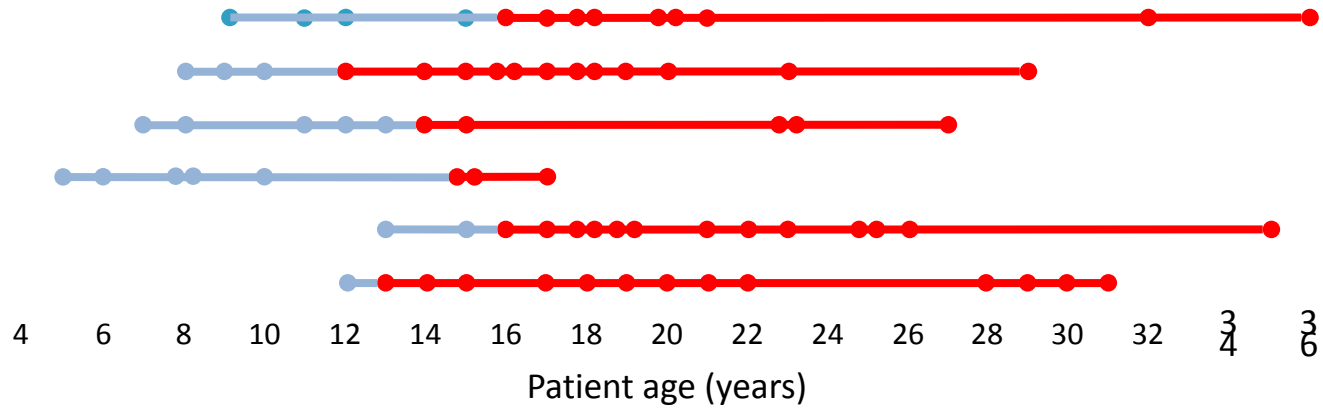


TGM4, iRCA

Development of TGM4 autoantibodies with age



TGM4 autoantibodies develops during puberty



Questions

- Early oocyte (ovarian) cryopreservation for all female APS-1 patients?
- Early sperm cryopreservation for all male APS-1 patients?

