Leiden University Medical Center

Obinutuzumab in Rituximab-intolerant ANCA-associated Vasculitis Patients

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ERKNet
The European Rare Kidney Disease Reference Network

rita

Center of Expertise for Lupus-, Vasculitis- and Complement-mediated Systemic diseases

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Introduction

- ANCA-associated vasculitis (AAV) is a rare, relapsing auto-immune disease
- Fundament for treatment is anti-CD20 therapy with rituximab (RTX)

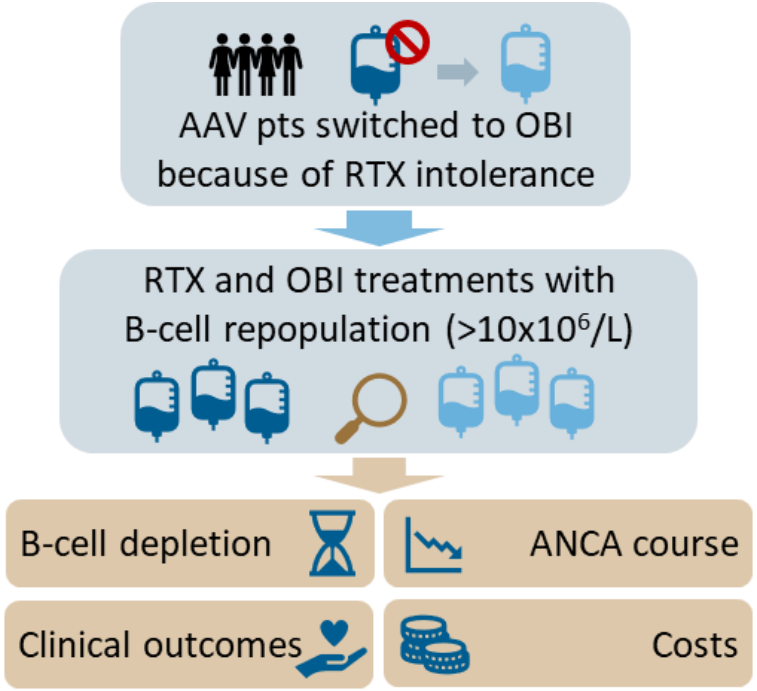
- Some patients become RTX intolerant
- Other treatment option have lower efficacy and are less cost-effective

- Obinutuzumab is humanized type 2 anti-CD20 therapy
  - Superior efficacy in malignancies (lymphocytic leukaemia and follicular lymphoma)
  - Data on efficacy in auto-immune diseases is scarce

Aim: Determine the immunological effects of (off-label) obinutuzumab in AAV patients
→ pivotal to dosing strategy and cost-effectiveness

Methods

Case-control setting with patients being their own control:



Results – Patients

6 AAV patients included

9x Obinutuzumab and 8x Rituximab treatments analysed:

- Median follow-up OBI: 22.6 [14.7; 25.8] months
- Median follow-up RTX: 18.7 [11.7-26.2] months

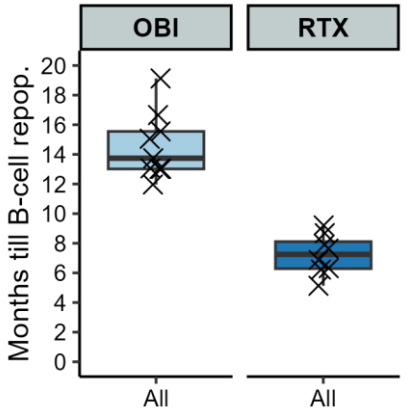
During Obinutuzumab follow-up:

- No serious infections
- 1 major relapse: >2 years after Obinutuzumab with full B-cell repopulation

Results – Immunological results

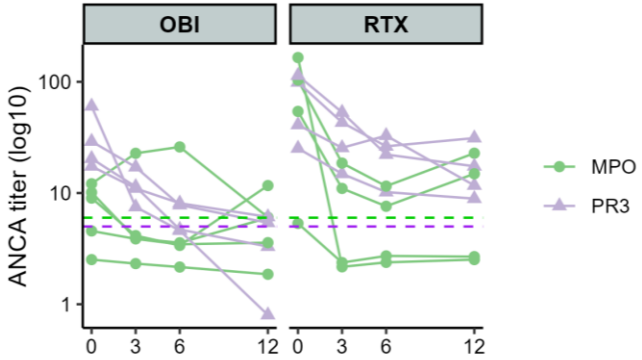
Obinutuzumab treatment led to substantially longer B-cell depletion than Rituximab:

- OBI: 13.7 [13.0-15.6] months
- RTX: 7.2 [6.3-8.1] months



Obinutuzumab treatment led to:

- More ANCA-seroconversion
  - OBI: 7/7 patients (100%)
  - RTX: 2/7 patients (29%)
- Slightly longer ANCA negative time
  - OBI: 13.1 [10.4-19.5] months
  - RTX: 7.3 [7.1-13.5] months



Results – Cost-effectiveness

Drug-related costs based on costs for:

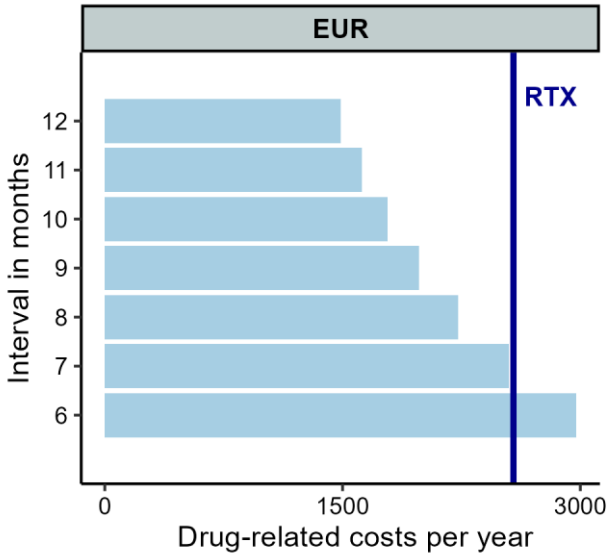
- drugs (medicijnkosten.nl)
- drug administration (in house price list)

Standard of care: RTX 500mg a 6 months

→ Obinutuzumab becomes cost-effective at an interval of 7 months.

→ This interval is well within the time of B-cell depletion.

	OBI	RTX
Drug (per 1000mg)	€ 2.304,66	€ 1.908,36
Administration	€ 335	€ 335



Conclusions and discussion

- Obinutuzumab showed superior immunological effects:
  - prolonged B-cell depletion
  - more frequent ANCA-seroconversion

  → Both associated with sustained remission
- Obinutuzumab can be cost-effective by increasing retreatment intervals

- However: only data included from Rituximab-intolerant patients
- Thus outcomes, optimal dosing strategy and cost-effectiveness should be confirmed in an RCT

- But until then, our data support off-label Obinutuzumab in Rituximab-intolerant patients
- This might be preferred over less (cost-)effective options

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Questions?

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