2023. LADI

OL RCT / ADA/ CD/ Flare

Increased versus conventional adalimumab dose interval for patients with Crohn's disease in stable remission (LADI): a pragmatic, open-label, non-inferiority, randomised controlled trial

Open-label, non-inferiority, parallel, randomised controlled trial.
Adults with CD in steroid-free clinical & biochemical remission for at least 9 months on ADA 40mg q2w.
Concomitant immunosupressants allowed.
Randomised to: Increase ADA dose intervals to 40mg q3w and further to q4w if in remission at 24w or to continue ADA q2w.

Primary endpoint: Cumulative incidence of persistent flares at w48 defined as the presence of at least 2 of the following: HBI≥5 , CRP≥10 mg/L and calprotectin >250 µg/g for more than 8w & a concurrent decrease in the ADA dose interval or start of escape medication.

Results:
- At w48, cumulative incidence of persistent flares 3% intervention group, non-inferior than control 0%.
- At 48w, intervention group less likely to be in clinical and biochemical remission than control group 72% vs 92%, p=0.038.
- More patients in the intervention needed escape medication 11% vs 2%, p=0.039
- 7 serious adverse events all in the intervention group, 2 were intestinal obstruction, possibly related to the intervention.

Conclusion:
The individual benefit of increasing adalimumab dose intervals versus the risk of disease recurrence is a trade-off that should take patient preferences regarding medication and the risk of a flare into account.

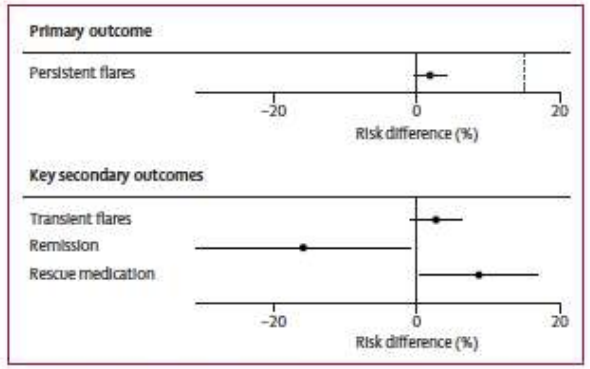

Figure 2: **Risk differences for the primary and key secondary outcomes comparing increased dose intervals with the conventional dose interval**
The dotted line indicates the 15% non-inferiority margin for the primary outcome.

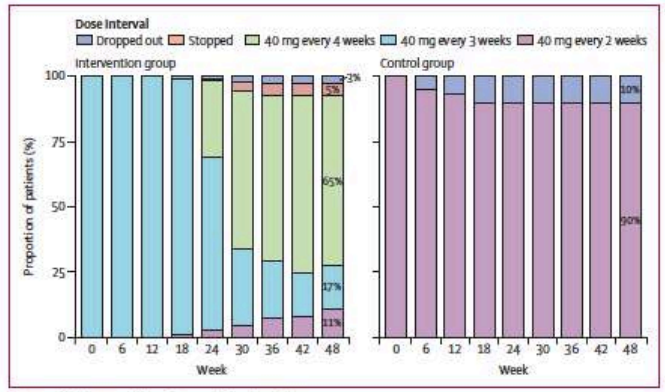

Figure 3: **Adalimumab dose intervals during follow-up**
Dropped out=participants who were lost to follow-up. Stopped=participants who stopped adalimumab but continued in the study.

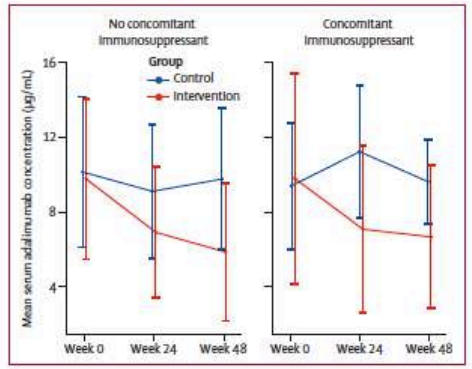

Figure 4: **Change in mean adalimumab serum concentration for both groups over the study period stratified by concomitant immunosuppressant use**
Whiskers show SD.

Van Linschoten RCA et al. Lancet Gastroenterol Hepatol.2023.